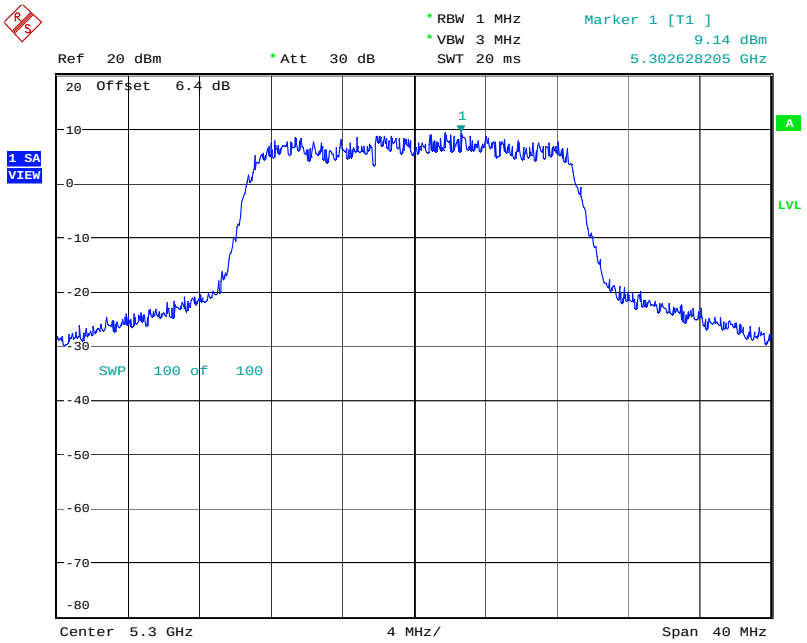
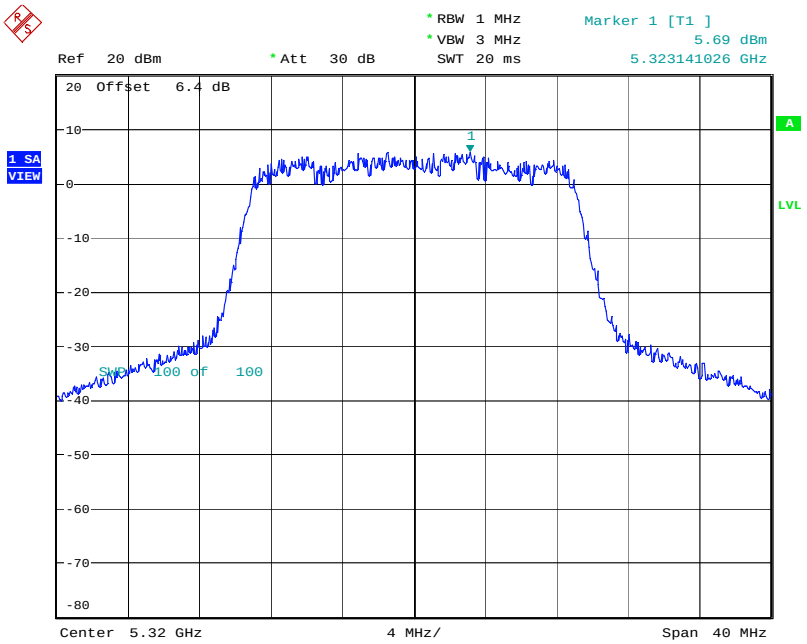
Power Density Plot on Configuration IEEE 802.11a Ant. 1 / 5300 MHz



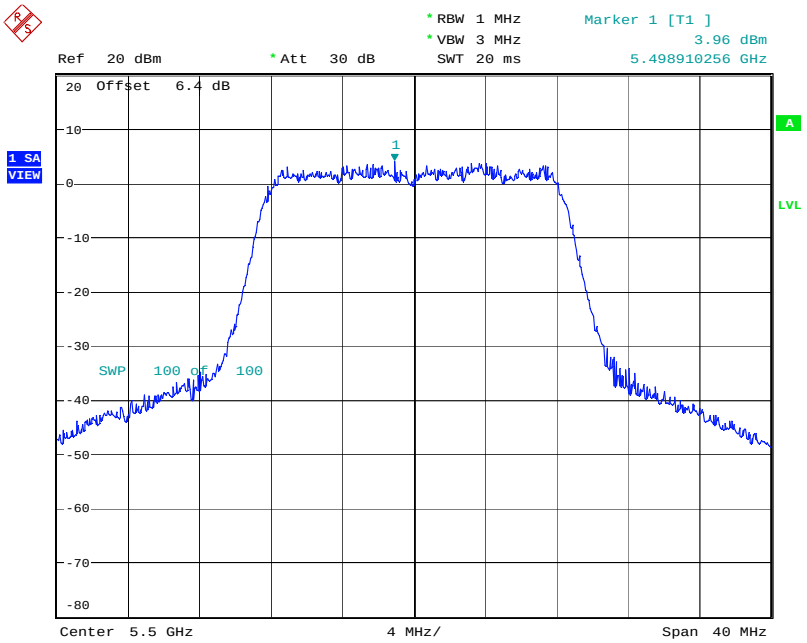
Date: 20.MAR.2008 19:56:23

Power Density Plot on Configuration IEEE 802.11a Ant. 1 / 5320 MHz



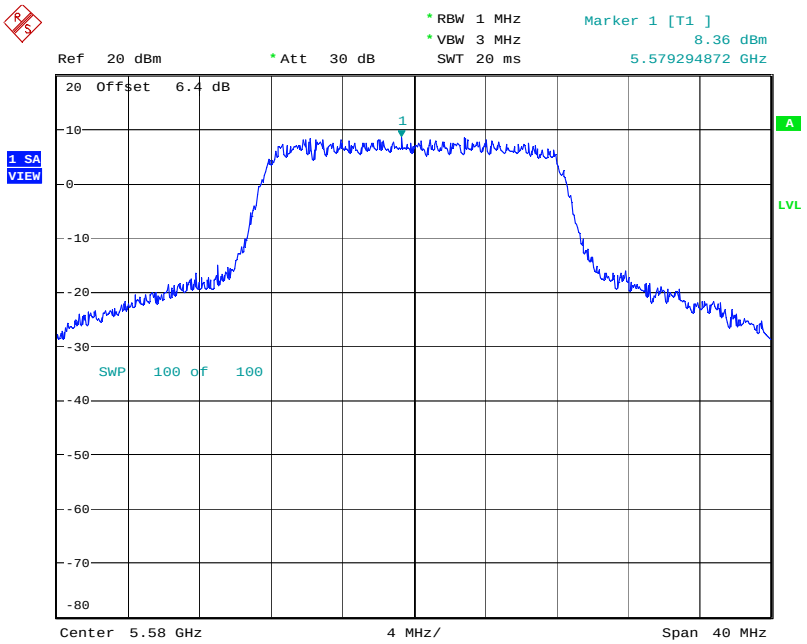
Date: 20.MAR.2008 19:55:33

Power Density Plot on Configuration IEEE 802.11a Ant. 1 / 5500 MHz



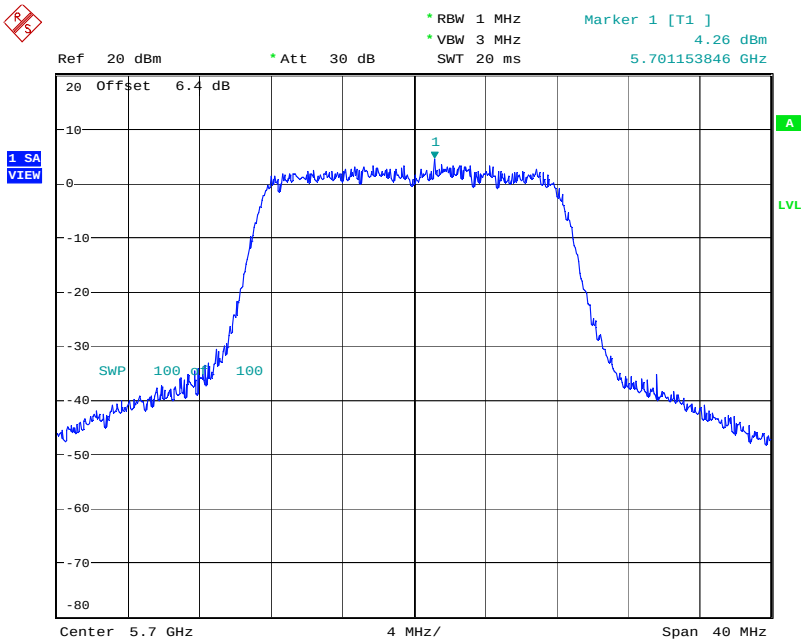
Date: 20.MAR.2008 20:18:46

Power Density Plot on Configuration IEEE 802.11a Ant. 1 / 5580 MHz

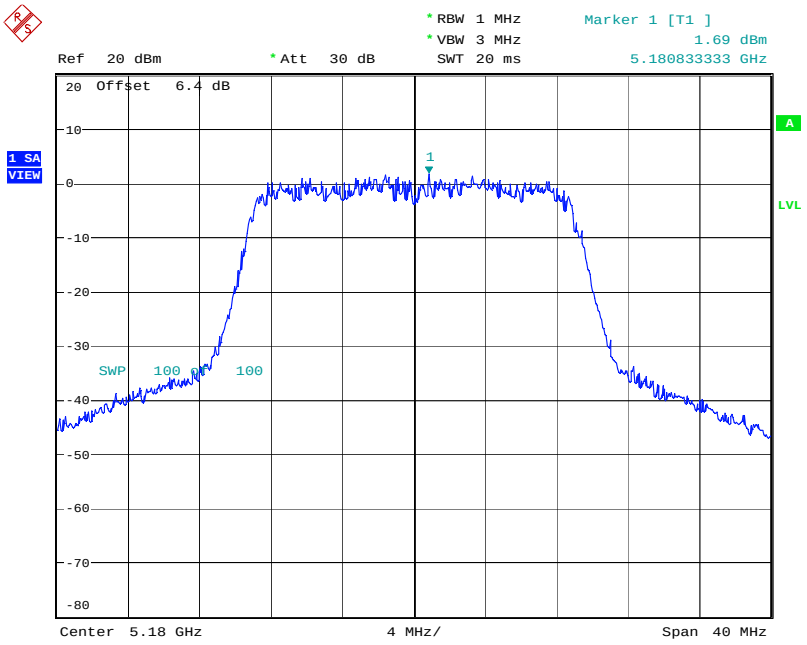


Date: 20.MAR.2008 20:17:48

Power Density Plot on Configuration IEEE 802.11a Ant. 1 / 5700 MHz

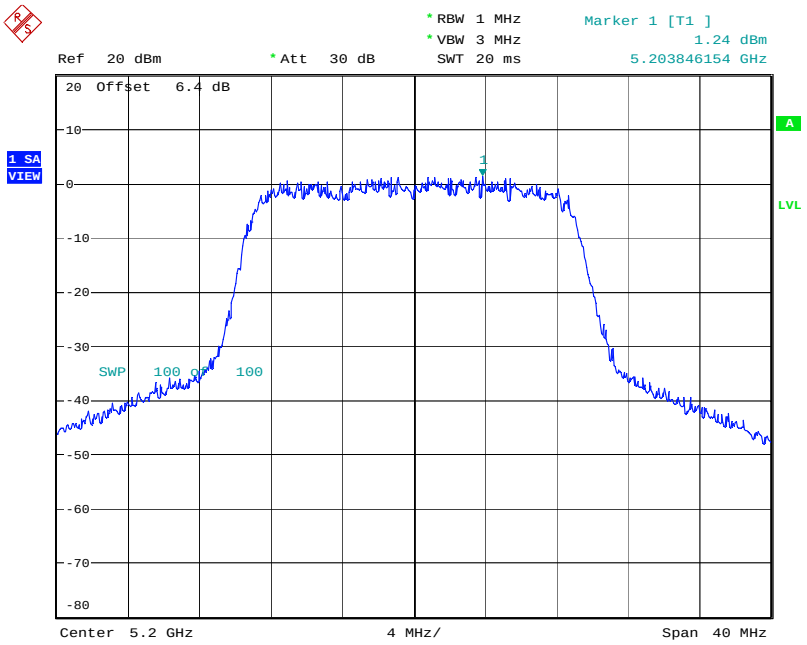


Power Density Plot on Configuration IEEE 802.11a Ant. 5 / 5180 MHz



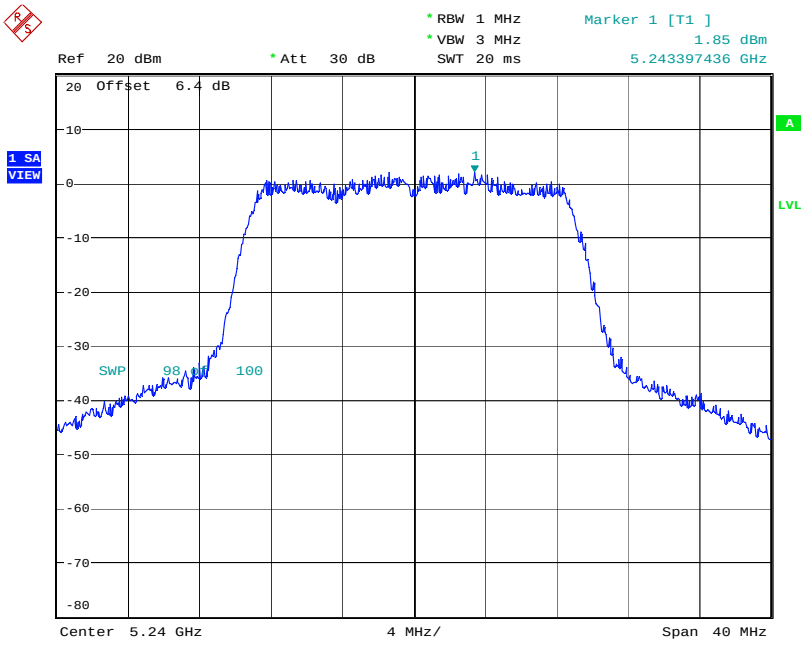
Date: 20.MAR.2008 20:02:43

Power Density Plot on Configuration IEEE 802.11a Ant. 5 / 5260 MHz



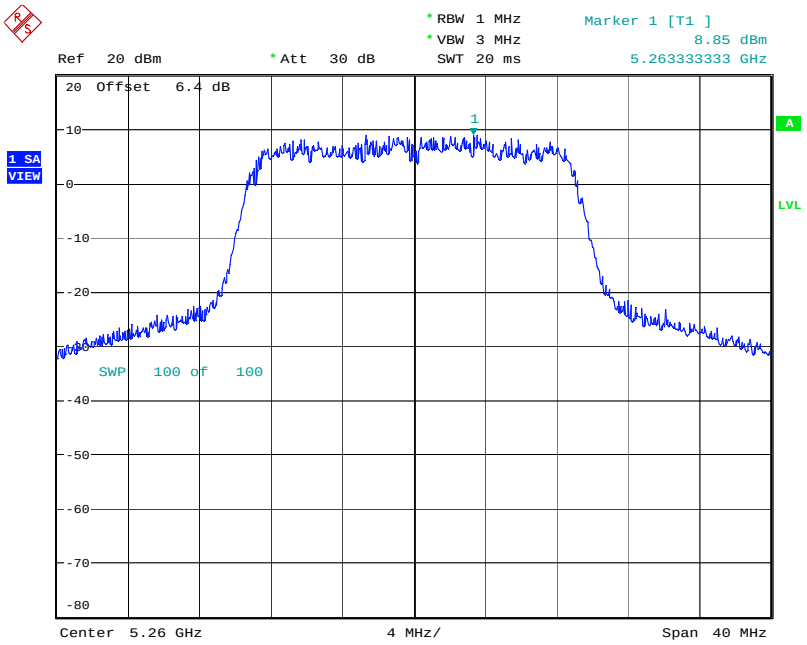
Date: 20.MAR.2008 20:01:09

Power Density Plot on Configuration IEEE 802.11a Ant. 5 / 5240 MHz



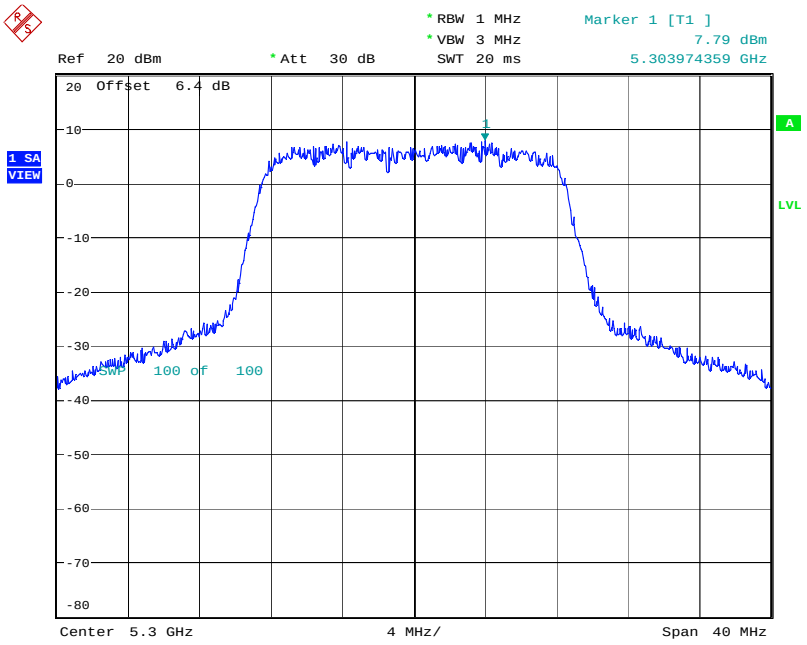
Date: 20.MAR.2008 19:58:55

Power Density Plot on Configuration IEEE 802.11a Ant. 5 / 5260 MHz



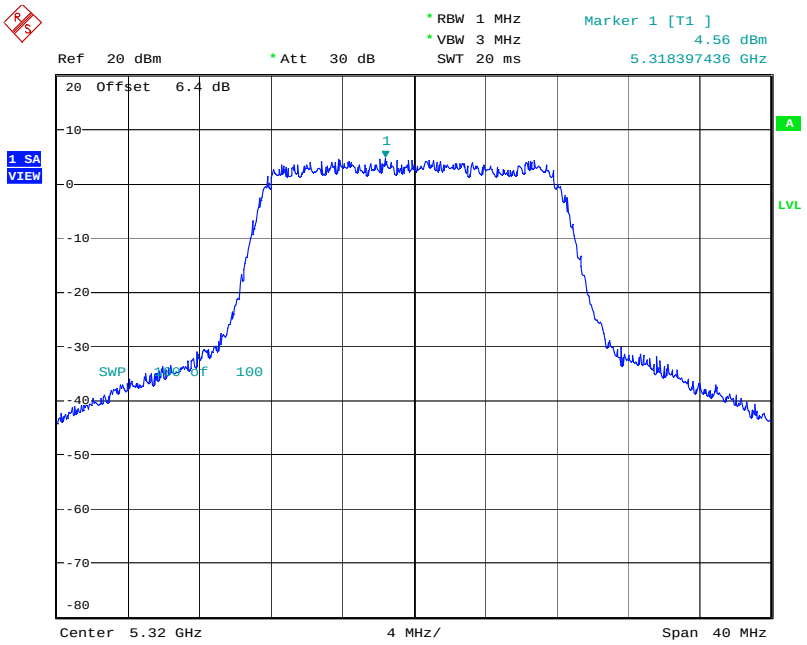
Date: 20.MAR.2008 19:57:22

Power Density Plot on Configuration IEEE 802.11a Ant. 5 / 5300 MHz



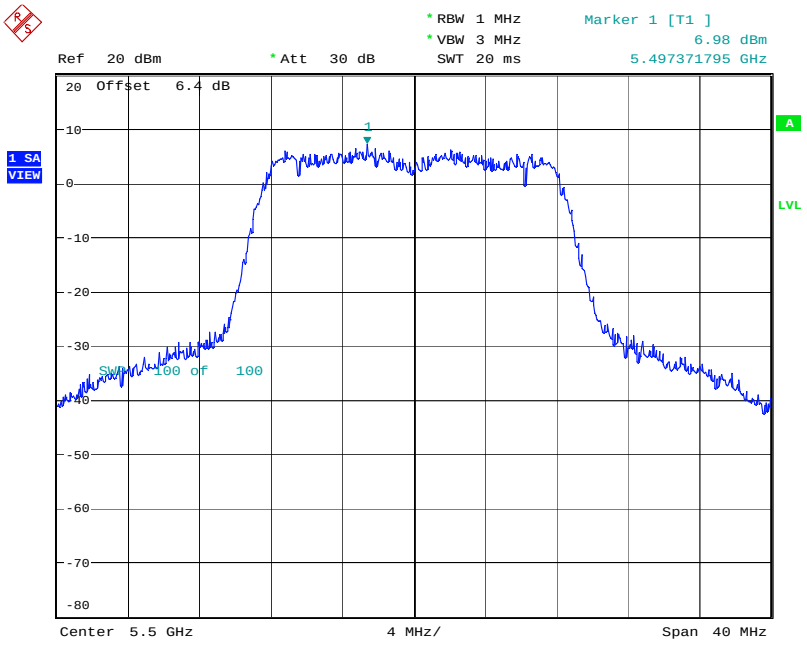
Date: 21.MAR.2008 16:45:03

Power Density Plot on Configuration IEEE 802.11a Ant. 5 / 5320 MHz



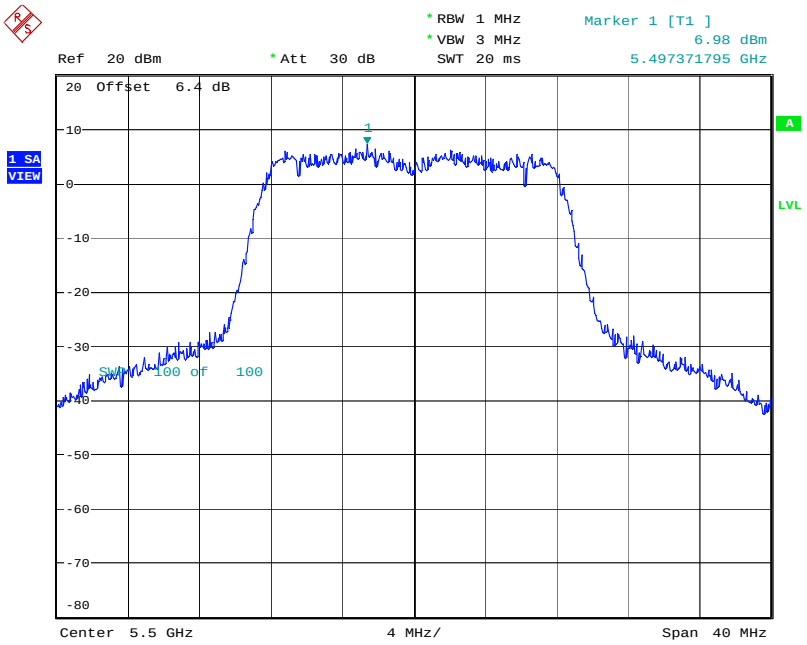
Date: 21.MAR.2008 16:45:54

Power Density Plot on Configuration IEEE 802.11a Ant. 5 / 5500 MHz



Date: 21.MAR.2008 16:47:06

Power Density Plot on Configuration IEEE 802.11a Ant. 5 / 5580 MHz



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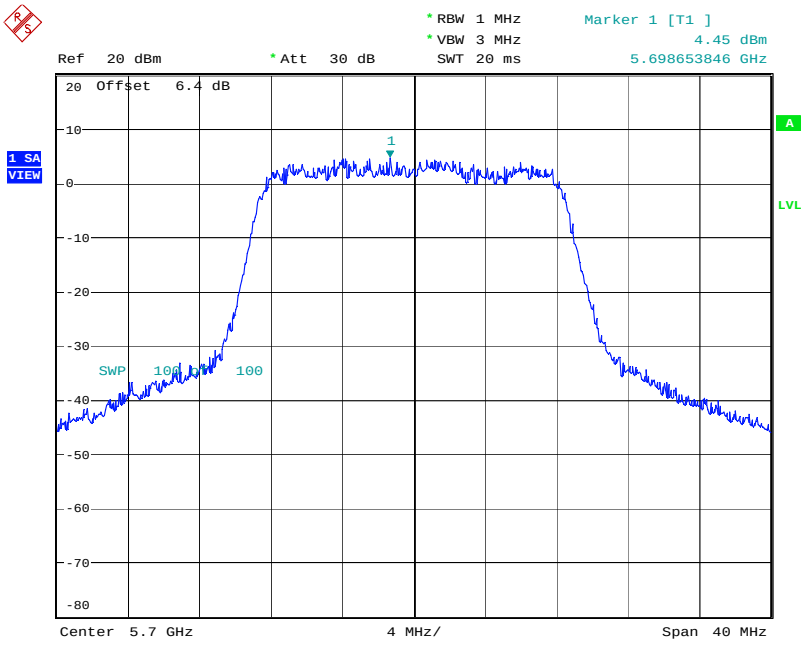
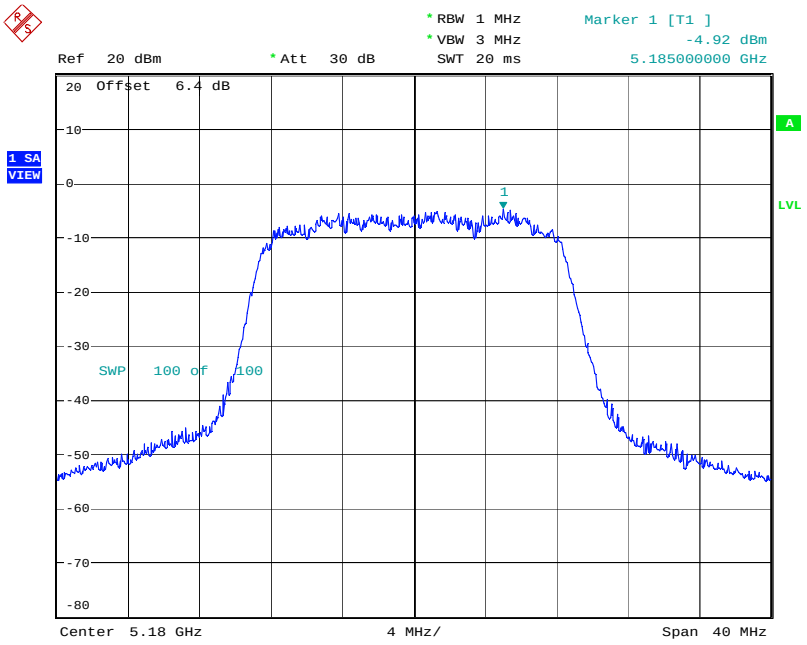
Power Density Plot on Configuration IEEE 802.11a Ant. 5 / 5700 MHz



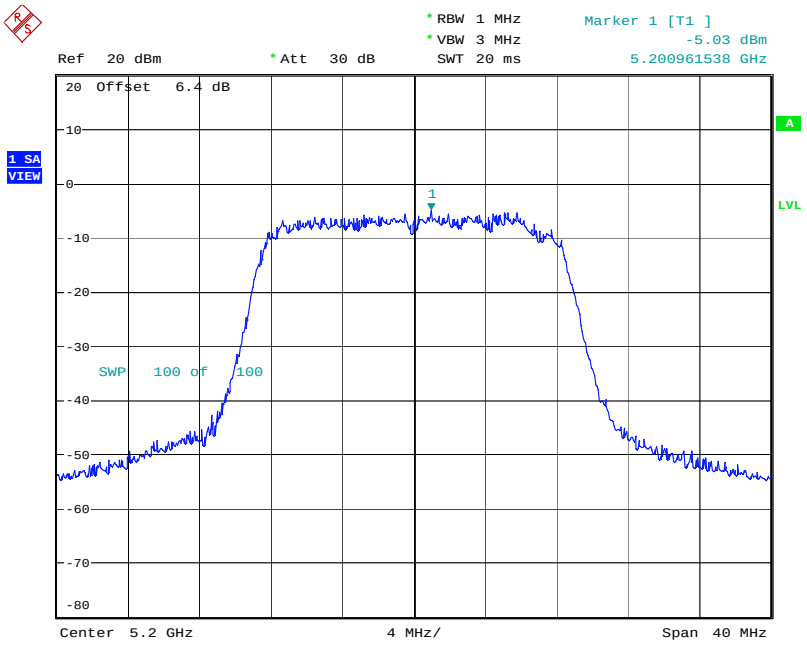
Date: 21.MAR.2008 16:47:59

Power Density Plot on Configuration IEEE 802.11a Ant. 6 / 5180 MHz



Date: 25.MAR.2008 14:25:17

Power Density Plot on Configuration IEEE 802.11a Ant. 6 / 5260 MHz



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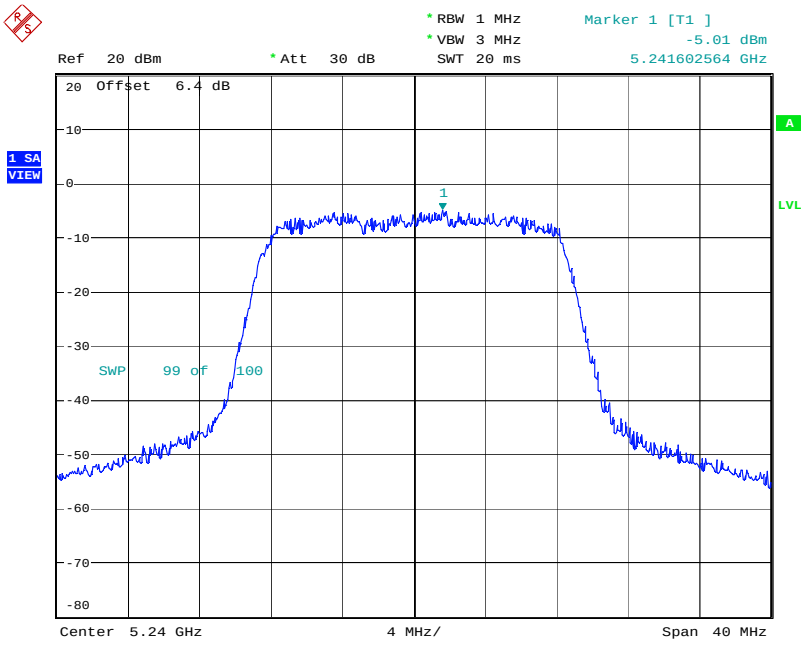
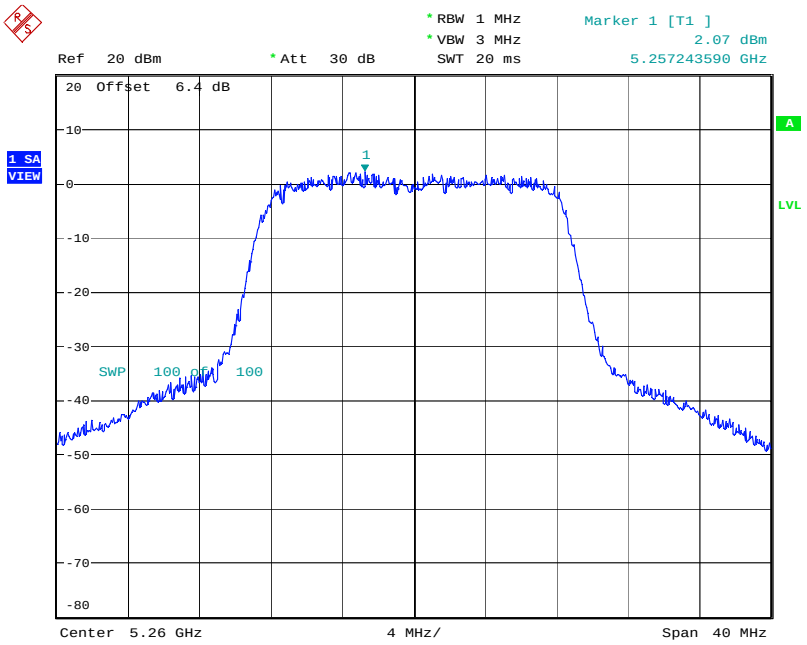
Power Density Plot on Configuration IEEE 802.11a Ant. 6 / 5240 MHz



Date: 25.MAR.2008 14:27:13

Power Density Plot on Configuration IEEE 802.11a Ant. 6 / 5260 MHz



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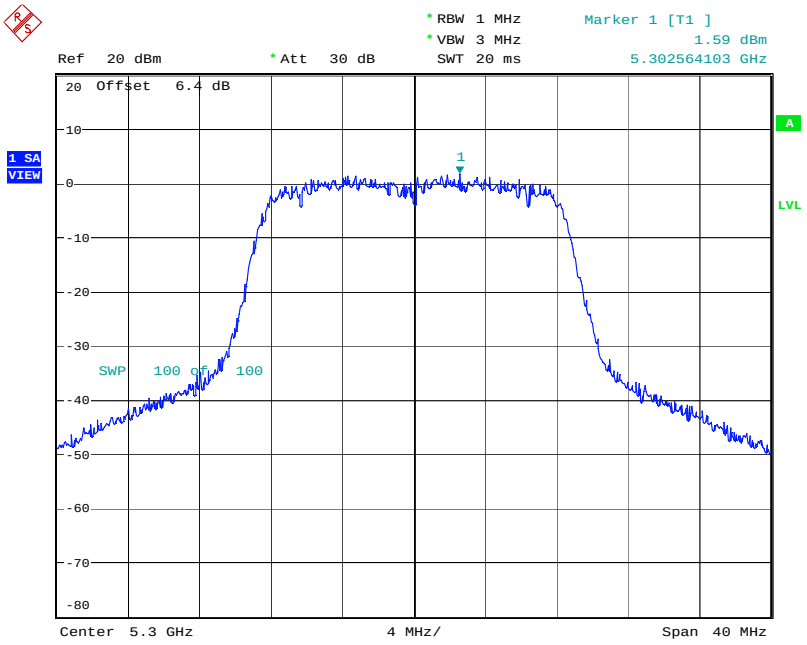
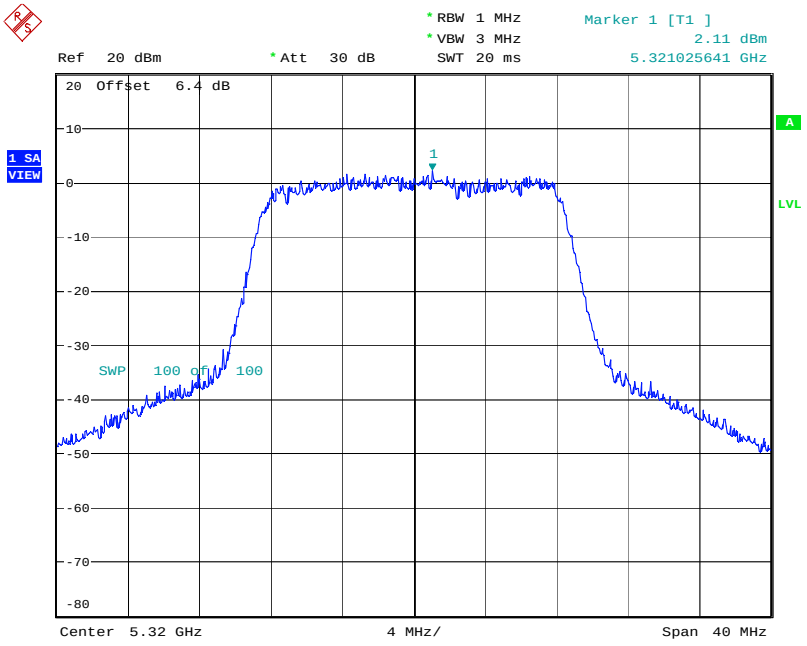
Power Density Plot on Configuration IEEE 802.11a Ant. 6 / 5300 MHz



Date: 25.MAR.2008 14:31:07

Power Density Plot on Configuration IEEE 802.11a Ant. 6 / 5320 MHz



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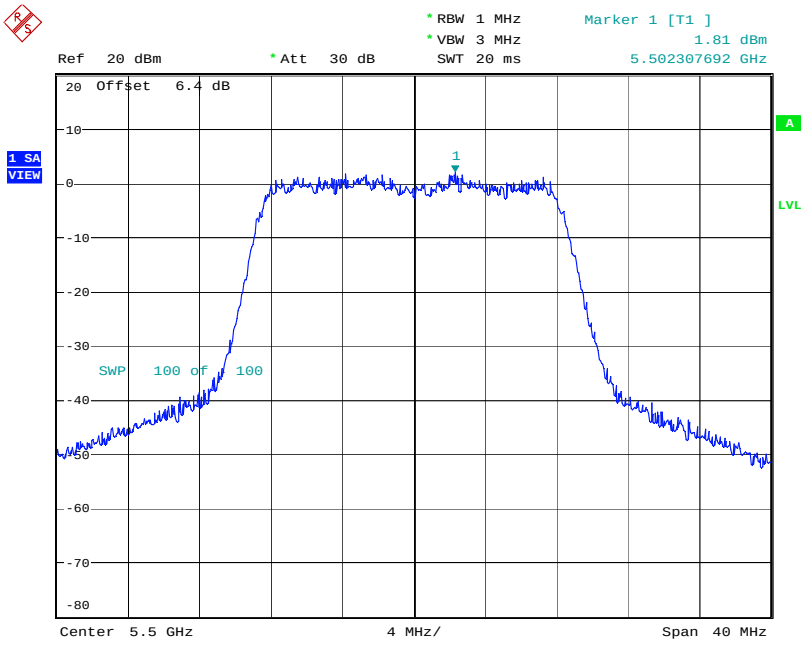
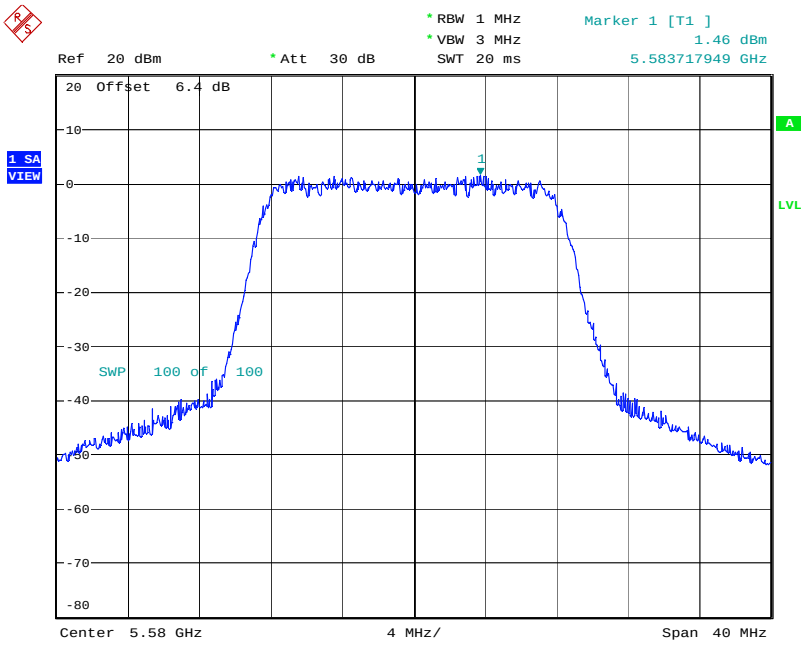
Power Density Plot on Configuration IEEE 802.11a Ant. 6 / 5500 MHz



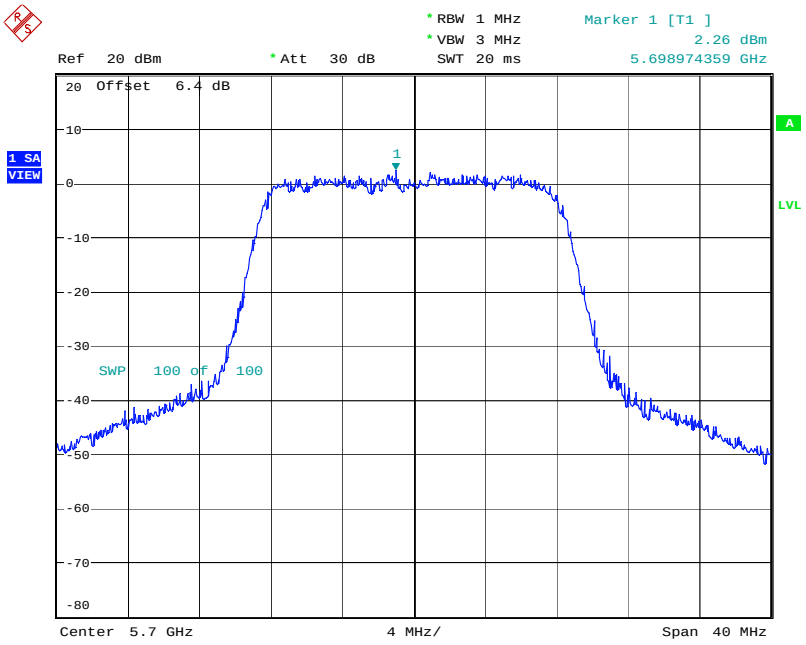
Date: 25.MAR.2008 14:32:50

Power Density Plot on Configuration IEEE 802.11a Ant. 6 / 5580 MHz

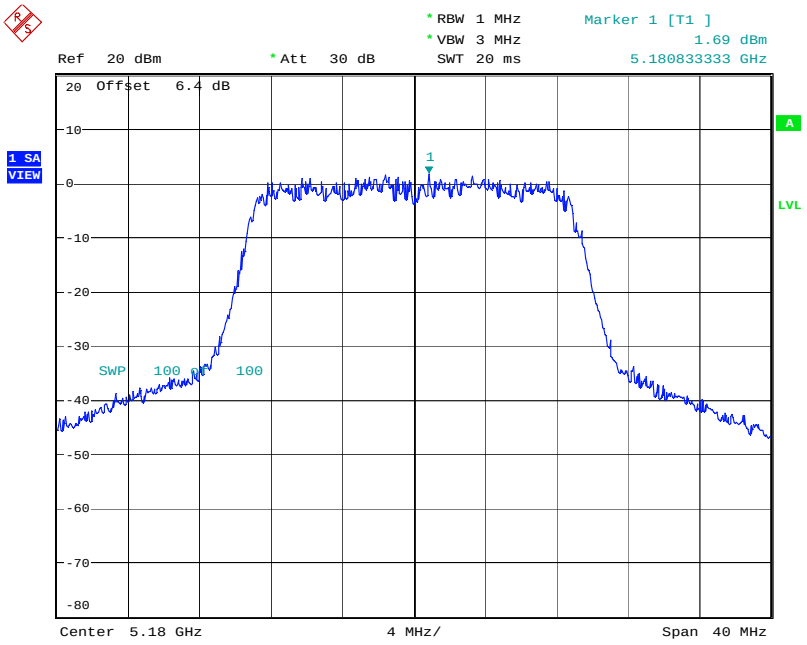


Date: 25.MAR.2008 14:34:01

Power Density Plot on Configuration IEEE 802.11a Ant. 6 / 5700 MHz

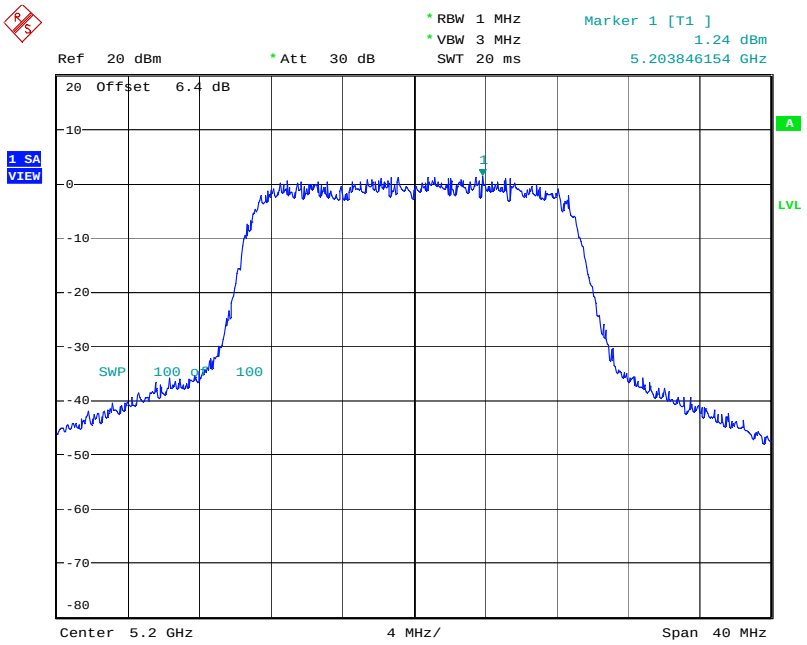


Power Density Plot on Configuration IEEE 802.11a Ant. 7 / 5180 MHz



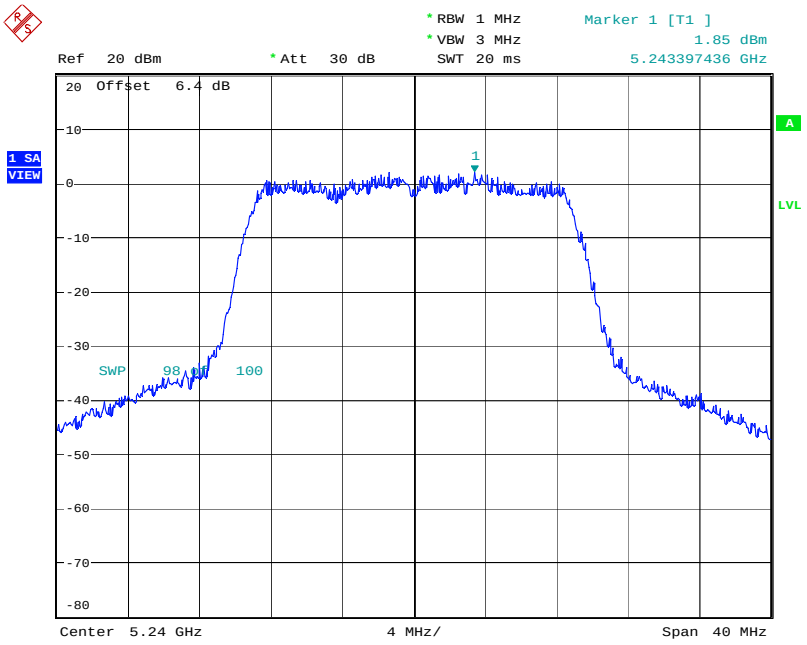
Date: 20.MAR.2008 20:02:43

Power Density Plot on Configuration IEEE 802.11a Ant. 7 / 5260 MHz



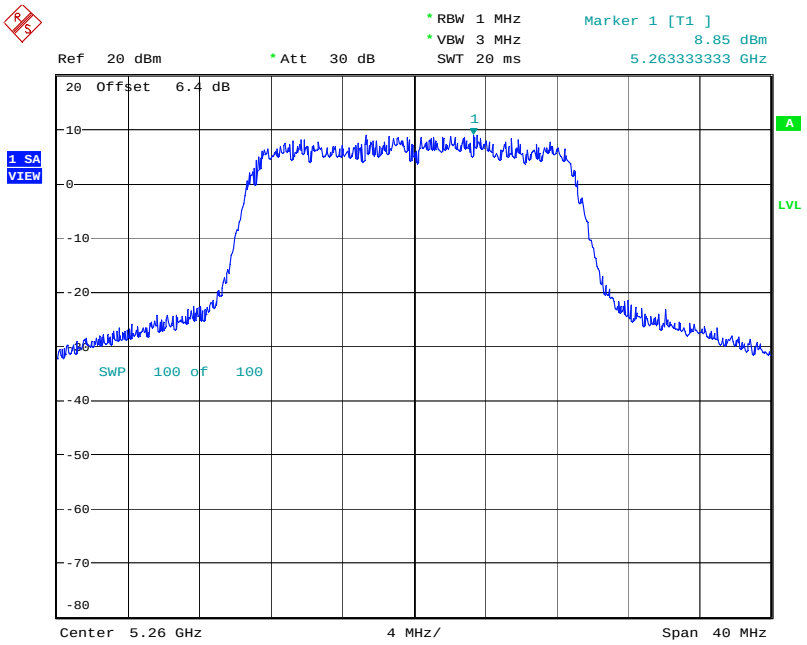
Date: 20.MAR.2008 20:01:09

Power Density Plot on Configuration IEEE 802.11a Ant. 7 / 5240 MHz



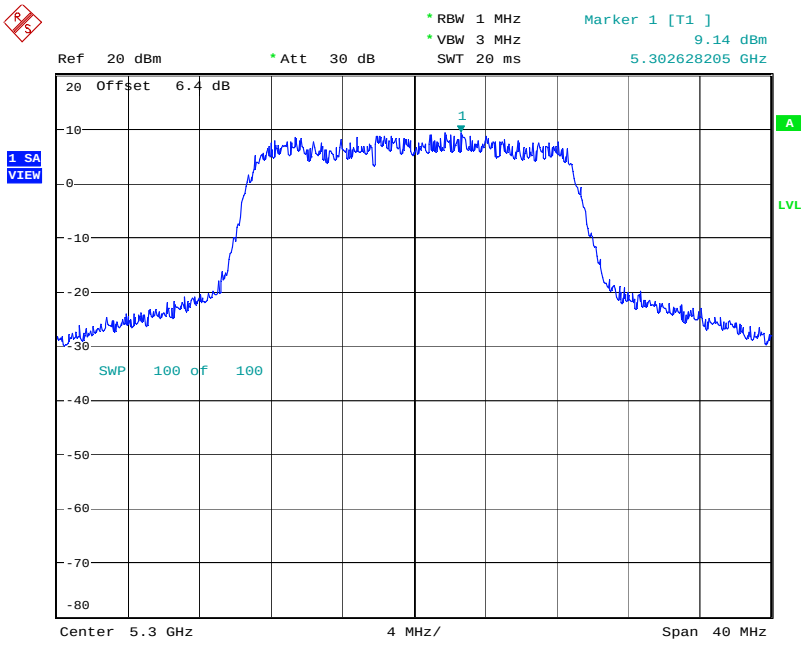
Date: 20.MAR.2008 19:58:55

Power Density Plot on Configuration IEEE 802.11a Ant. 7 / 5260 MHz



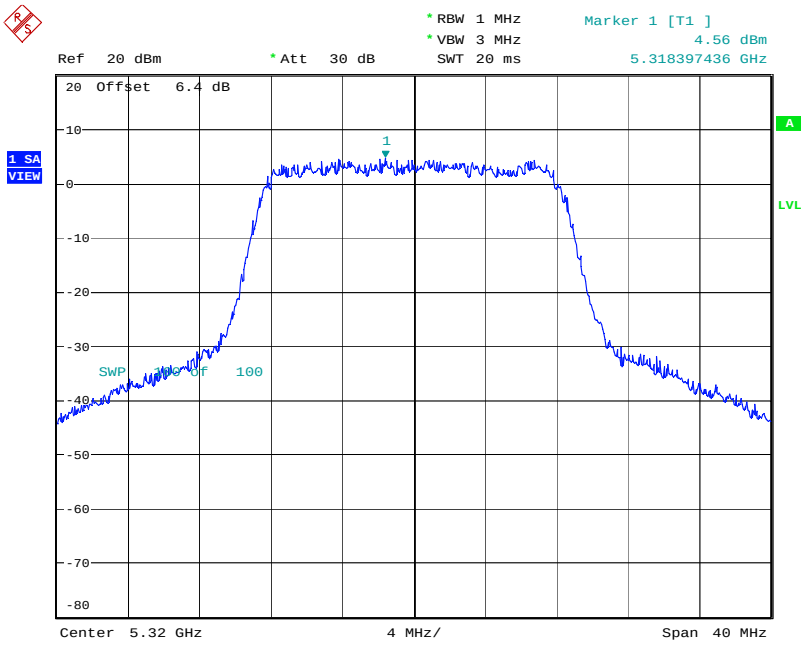
Date: 20.MAR.2008 19:57:22

Power Density Plot on Configuration IEEE 802.11a Ant. 7 / 5300 MHz



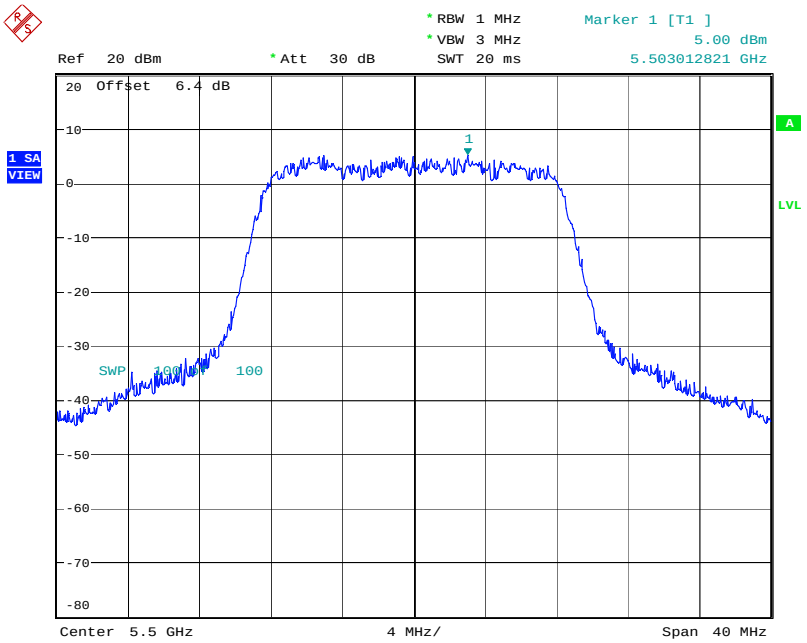
Date: 20.MAR.2008 19:56:23

Power Density Plot on Configuration IEEE 802.11a Ant. 7 / 5320 MHz



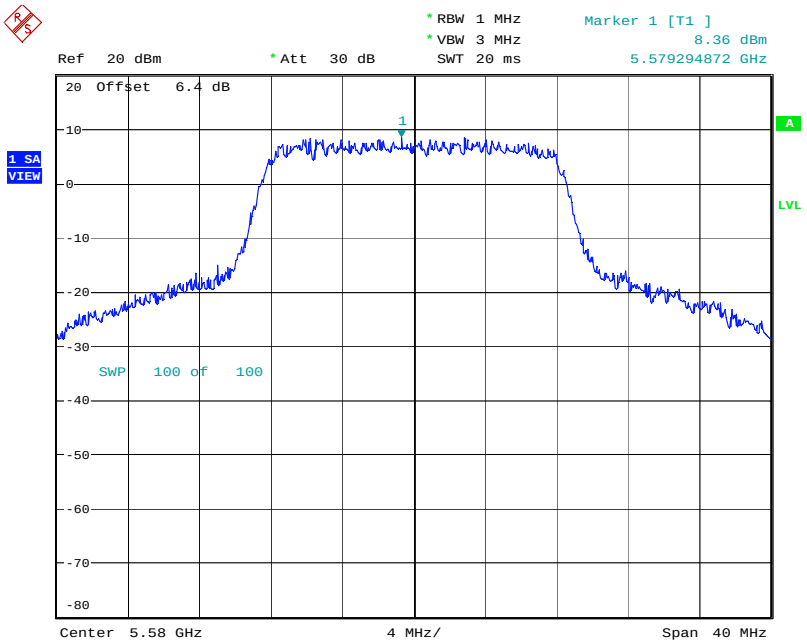
Date: 21.MAR.2008 16:45:54

Power Density Plot on Configuration IEEE 802.11a Ant. 7 / 5500 MHz



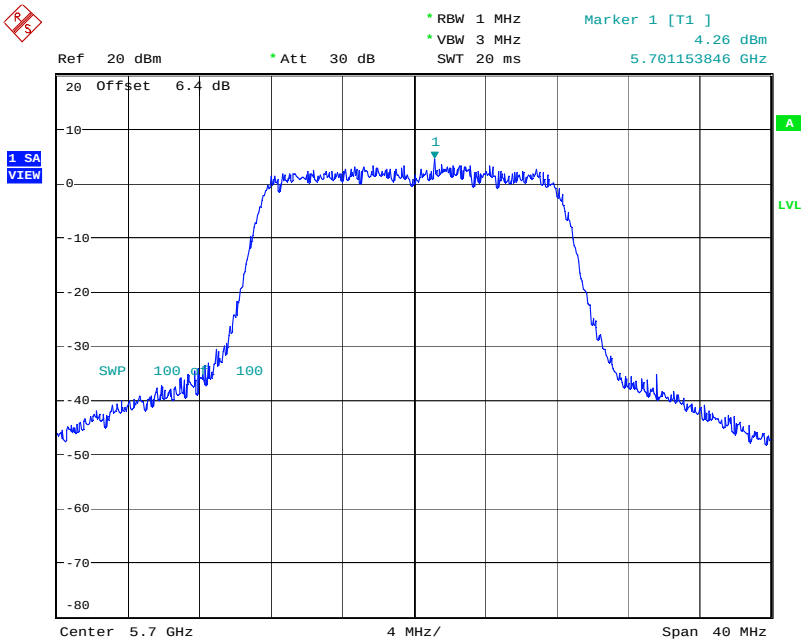
Date: 26.MAR.2008 17:33:46

Power Density Plot on Configuration IEEE 802.11a Ant. 7 / 5580 MHz



Date: 20.MAR.2008 20:17:48

Power Density Plot on Configuration IEEE 802.11a Ant. 7 / 5700 MHz



4.5. Peak Excursion Measurement

4.5.1. Limit

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emissions bandwidth whichever is less.

4.5.2. Measuring Instruments and Setting

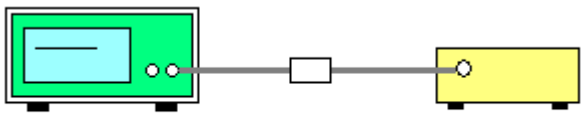
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RB	1000 kHz (Peak Trace) / 1000 kHz (Average Trace)
VB	3000 kHz (Peak Trace) / 300 kHz (Average Trace)
Detector	Peak (Peak Trace) / Sample (Average Trace)
Trace	Max Hold
Sweep Time	60s

4.5.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. Set the spectrum analyzer span to view the entire emissions bandwidth. The largest difference between the following two traces (Peak Trace and Average Trace) must be ≤ 13 dB for all frequencies across the emissions bandwidth. Submit a plot.
3. Peak Trace: Set RBW = 1 MHz, VBW ≥ 3 MHz with peak detector and max-hold settings.
4. Average Trace: Method #3—video averaging with max hold--and sum power across the band. Set span to encompass the entire emissions bandwidth (EBW) of the signal. Set sweep trigger to “free run”. Set RBW = 1 MHz. Set VBW ≥ 1/T (IEEE 802.11a VBW = 300kHz ≥ 1/4μs). Use sample detector mode if bin width (i.e., span/number of points in spectrum) < 0.5 RBW. Otherwise use peak detector mode . Set max hold. Allow max hold to run for 60 seconds.
5. Measuring multiple antennas, the connector is required to link with spectrum analyzer through a combiner.

4.5.4. Test Setup Layout



4.5.5. Test Deviation

There is no deviation with the original standard.

4.5.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.5.7. Test Result of Peak Excursion

Temperature	22°C	Humidity	61%
Test Engineer	Sam Chen	Configurations	802.11a / Antenna 1

Configuration IEEE 802.11a Ant. 1

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
36	5180 MHz	5.37	13	Complies
40	5260 MHz	6.90	13	Complies
48	5240 MHz	5.41	13	Complies
52	5260 MHz	5.90	13	Complies
60	5300 MHz	3.53	13	Complies
64	5320 MHz	4.87	13	Complies
100	5500 MHz	5.17	13	Complies
116	5580 MHz	4.85	13	Complies
140	5700 MHz	6.18	13	Complies

Temperature	22°C	Humidity	61%
Test Engineer	Sam Chen	Configurations	802.11a / Antenna 5

Configuration IEEE 802.11a Ant. 5

Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
36	5180 MHz	5.37	13	Complies
40	5260 MHz	6.90	13	Complies
48	5240 MHz	5.41	13	Complies
52	5260 MHz	5.90	13	Complies
60	5300 MHz	4.96	13	Complies
64	5320 MHz	4.86	13	Complies
100	5500 MHz	5.38	13	Complies
116	5580 MHz	4.85	13	Complies
140	5700 MHz	5.10	13	Complies

Temperature	22°C	Humidity	61%
Test Engineer	Sam Chen	Configurations	802.11a / Antenna 6

Configuration IEEE 802.11a Ant. 6

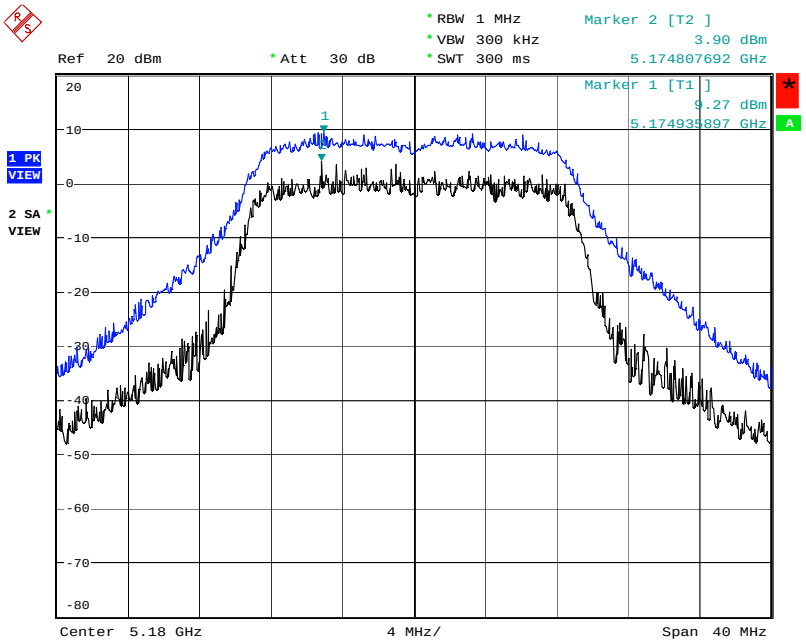
Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
36	5180 MHz	5.69	13	Complies
40	5260 MHz	5.45	13	Complies
48	5240 MHz	5.46	13	Complies
52	5260 MHz	4.61	13	Complies
60	5300 MHz	5.12	13	Complies
64	5320 MHz	4.84	13	Complies
100	5500 MHz	5.31	13	Complies
116	5580 MHz	4.85	13	Complies
140	5700 MHz	5.82	13	Complies

Temperature	22°C	Humidity	61%
Test Engineer	Sam Chen	Configurations	802.11a / Antenna 7

Configuration IEEE 802.11a Ant. 7

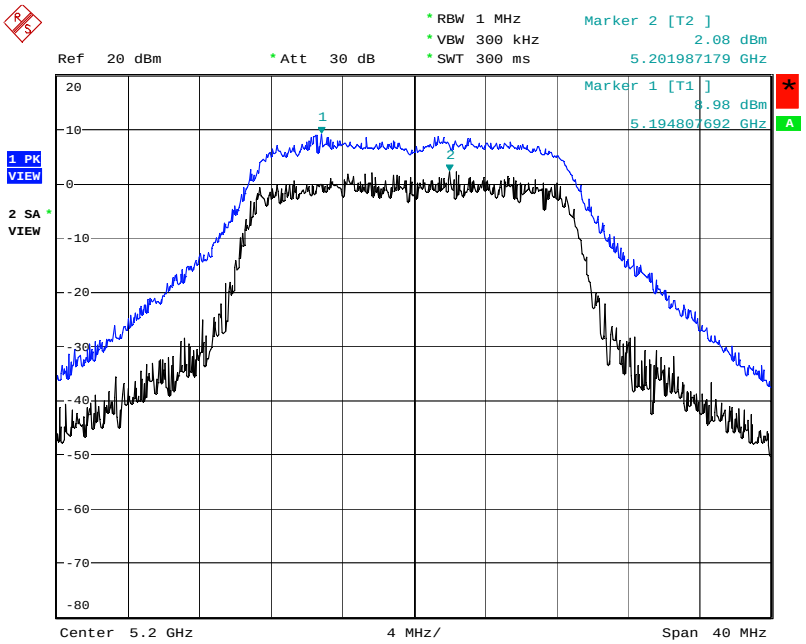
Channel	Frequency	Peak Excursion (dB)	Max. Limit (dB)	Result
36	5180 MHz	5.37	13	Complies
40	5260 MHz	6.90	13	Complies
48	5240 MHz	5.41	13	Complies
52	5260 MHz	5.90	13	Complies
60	5300 MHz	3.53	13	Complies
64	5320 MHz	4.86	13	Complies
100	5500 MHz	5.12	13	Complies
116	5580 MHz	4.85	13	Complies
140	5700 MHz	6.18	13	Complies

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 1 / 5180 MHz



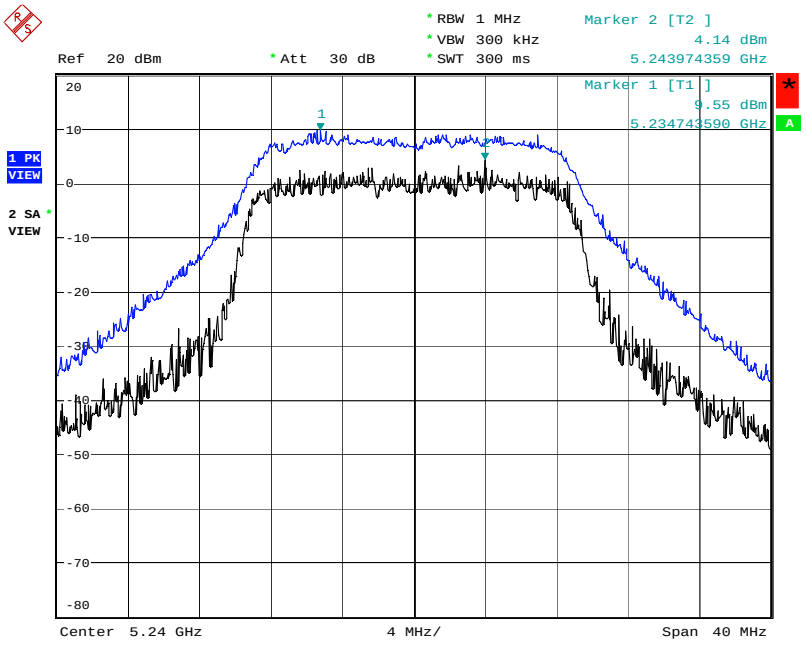
Date: 20.MAR.2008 20:02:55

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 1 / 5260 MHz

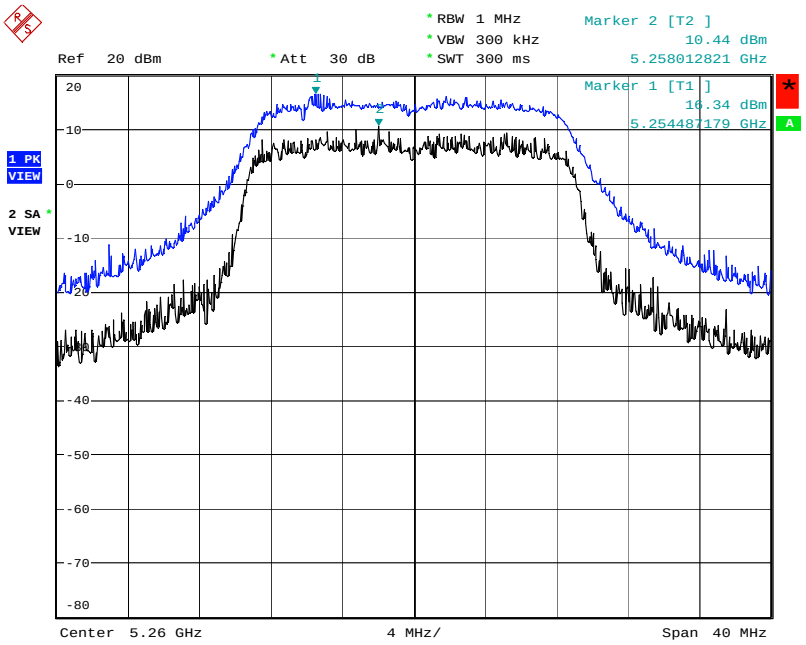


Date: 20.MAR.2008 20:01:21

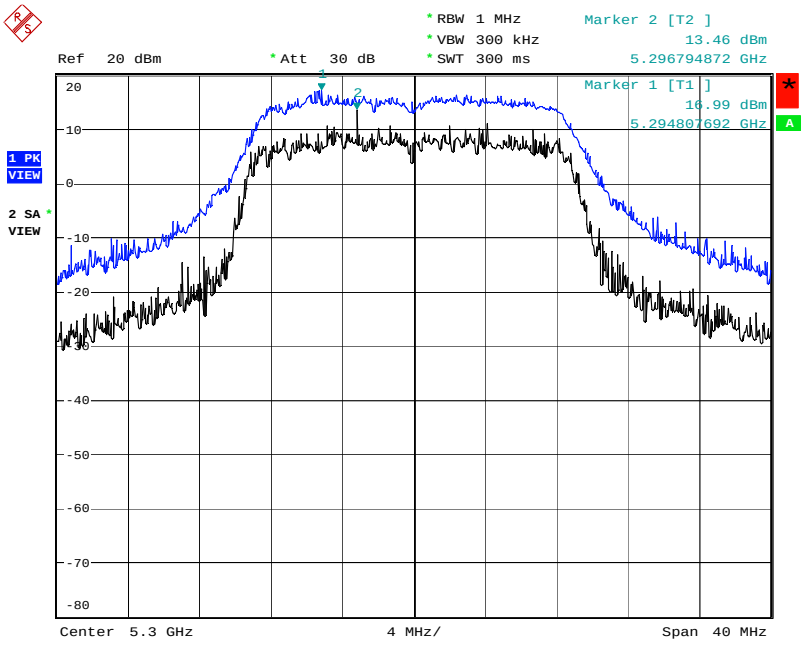
Peak Excursion Plot on Configuration IEEE 802.11a Ant. 1 / 5240 MHz



Peak Excursion Plot on Configuration IEEE 802.11a Ant. 1 / 5260 MHz



Peak Excursion Plot on Configuration IEEE 802.11a Ant. 1 / 5300 MHz



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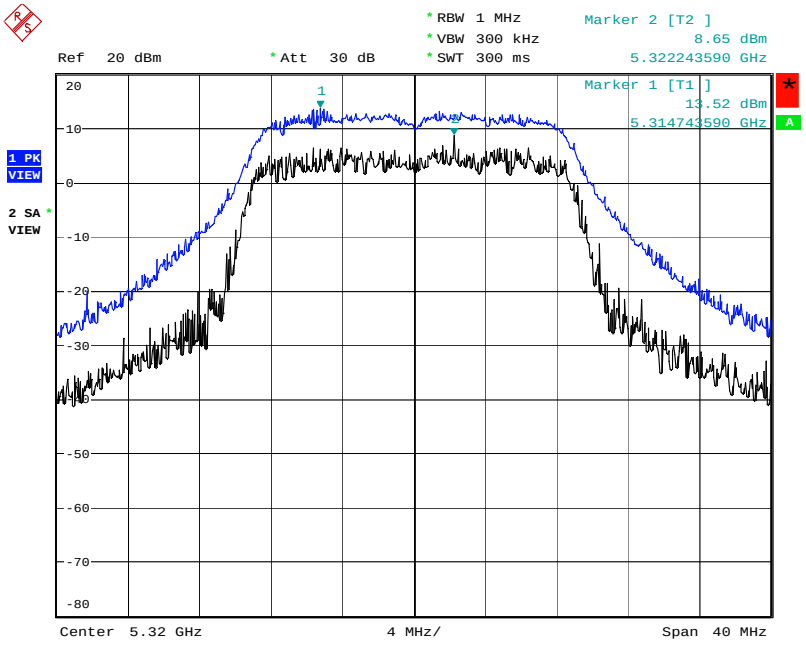
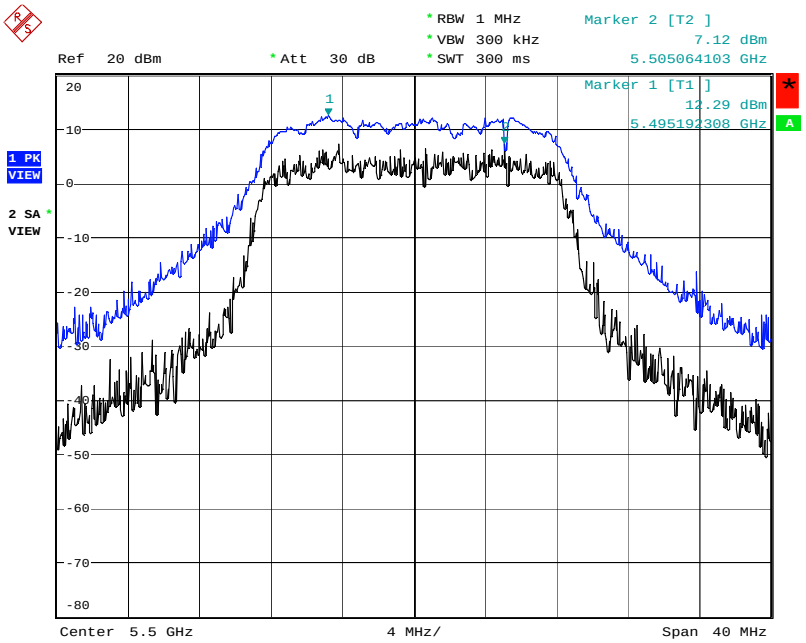
Peak Excursion Plot on Configuration IEEE 802.11a Ant. 1 / 5320 MHz



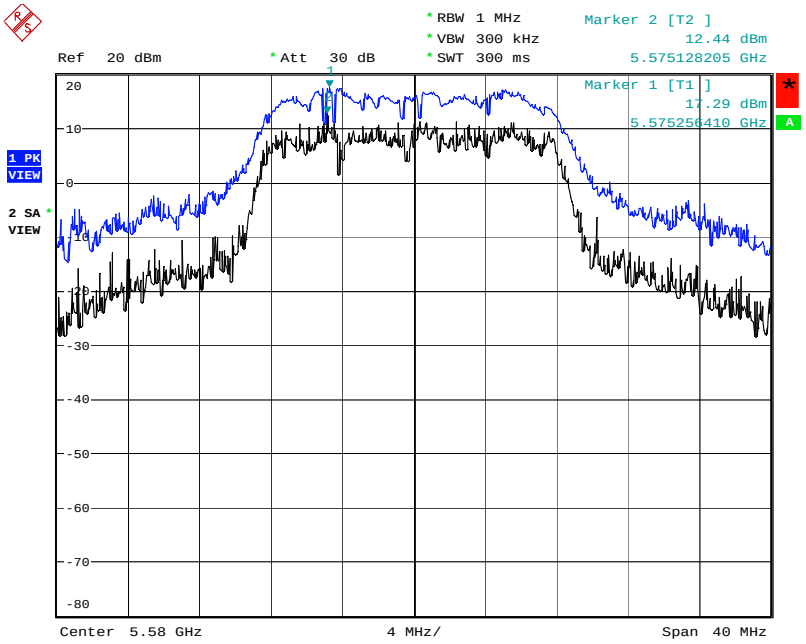
Date: 20.MAR.2008 19:55:46

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 1 / 5500 MHz



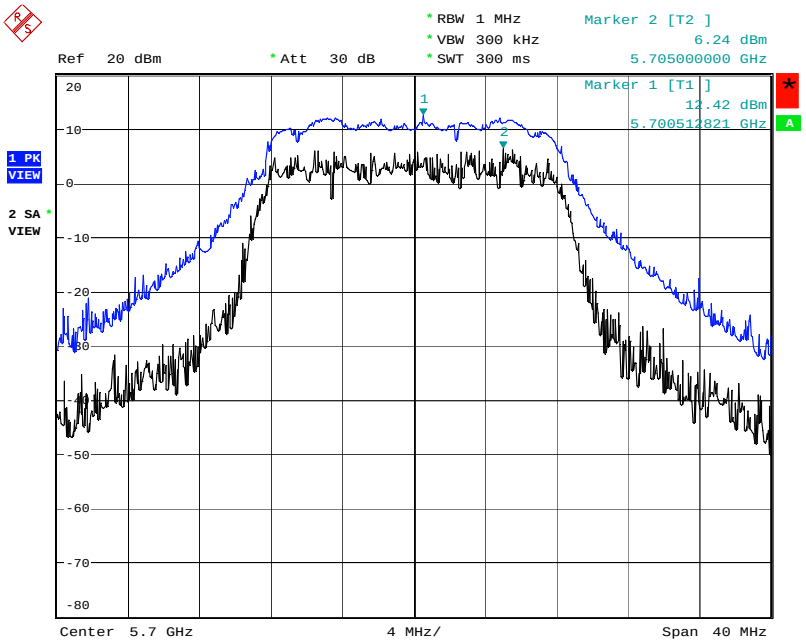
Date: 20.MAR.2008 20:19:00

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 1 / 5580 MHz



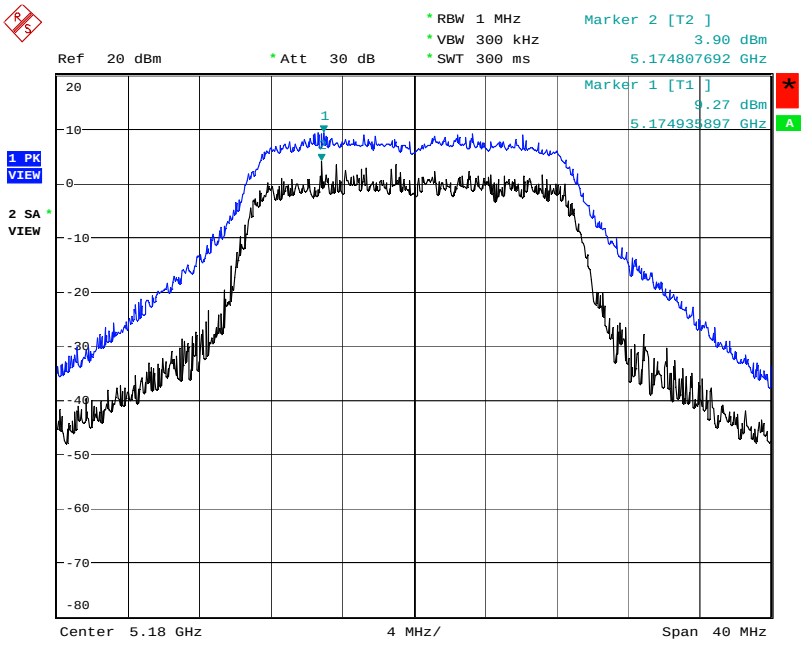
Date: 20.MAR.2008 20:18:01

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 1 / 5700 MHz



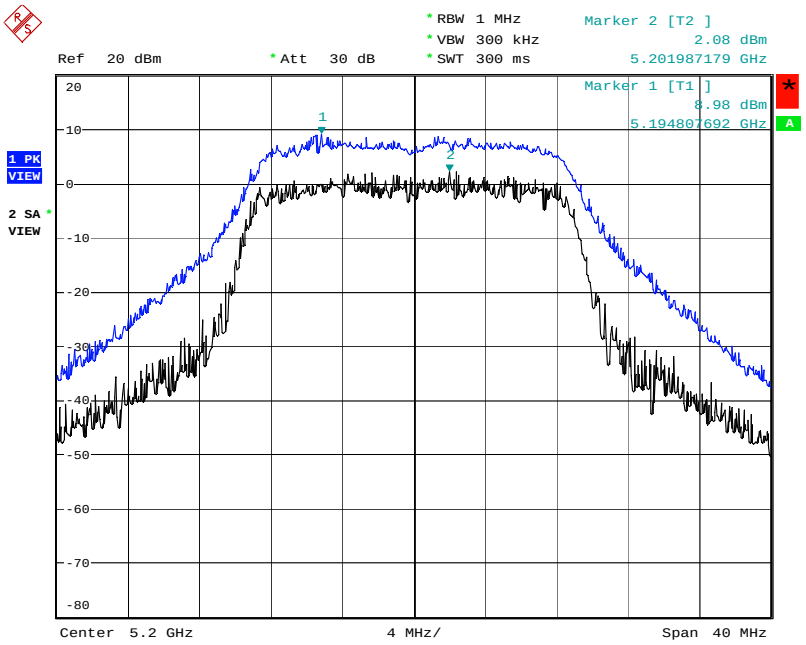
Date: 20.MAR.2008 20:17:00

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 5 / 5180 MHz



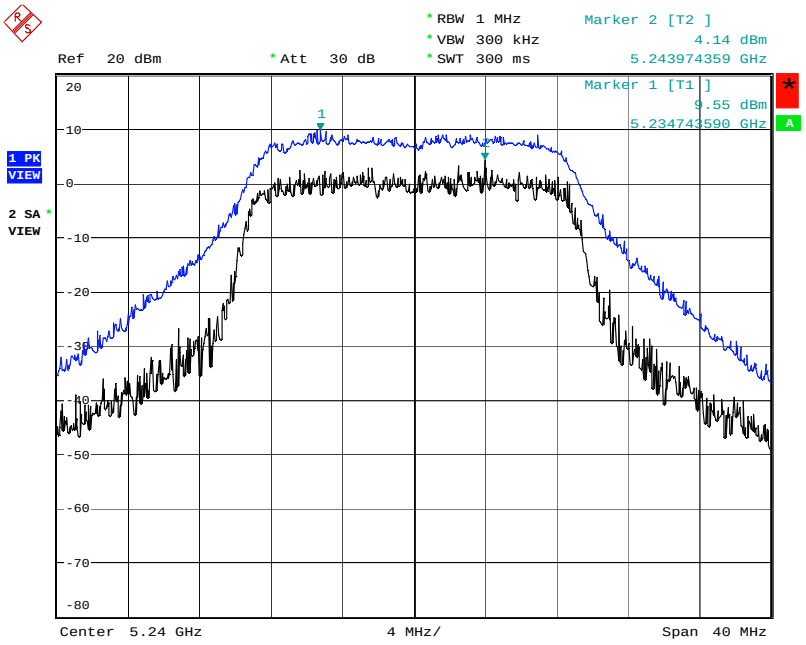
Date: 20.MAR.2008 20:02:55

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 5 / 5260 MHz

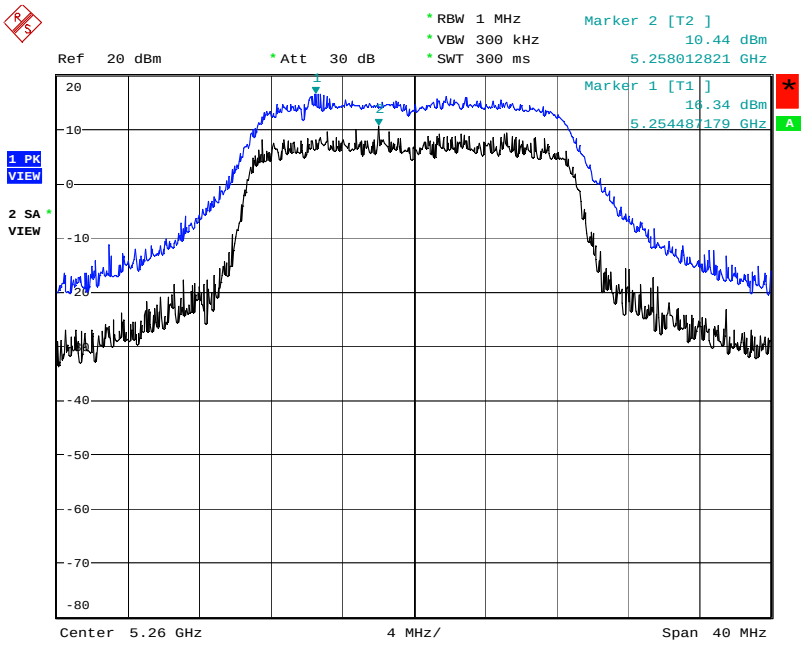


Date: 20.MAR.2008 20:01:21

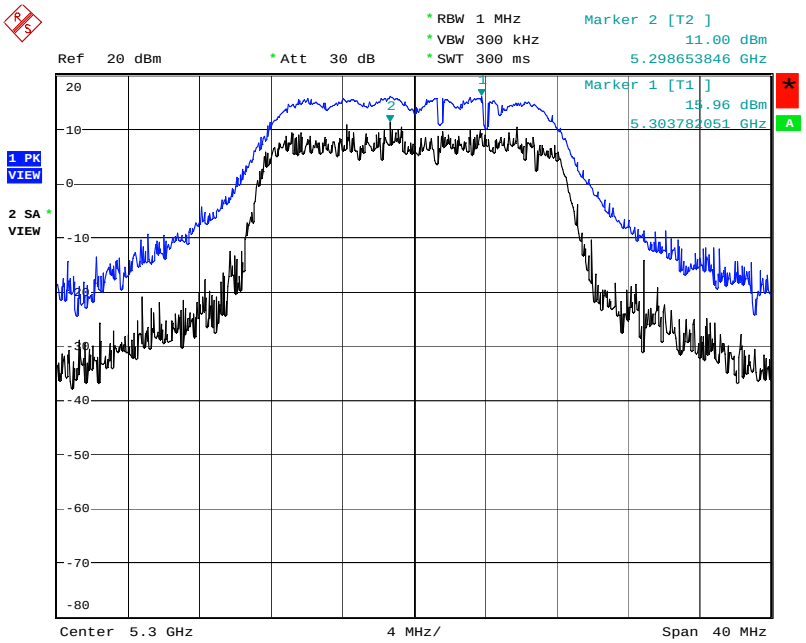
Peak Excursion Plot on Configuration IEEE 802.11a Ant. 5 / 5240 MHz



Peak Excursion Plot on Configuration IEEE 802.11a Ant. 5 / 5260 MHz

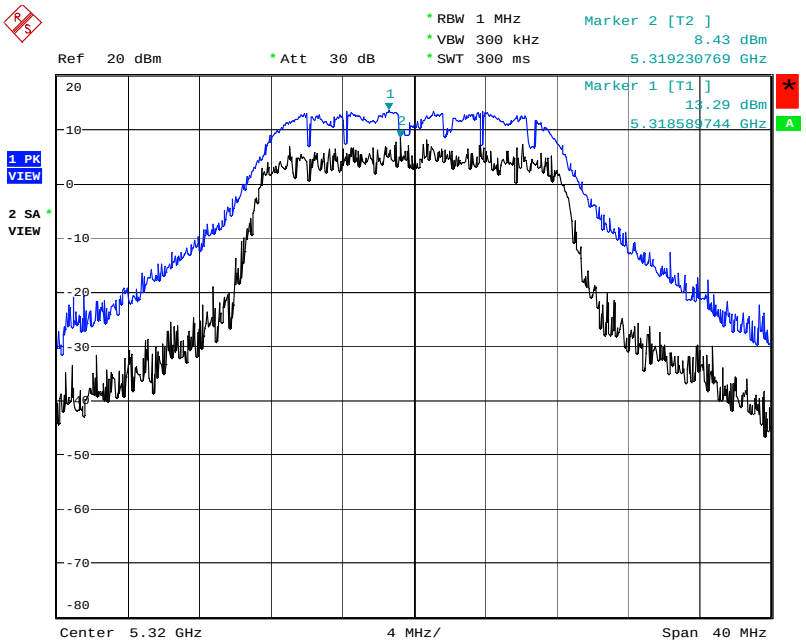


Peak Excursion Plot on Configuration IEEE 802.11a Ant. 5 / 5300 MHz



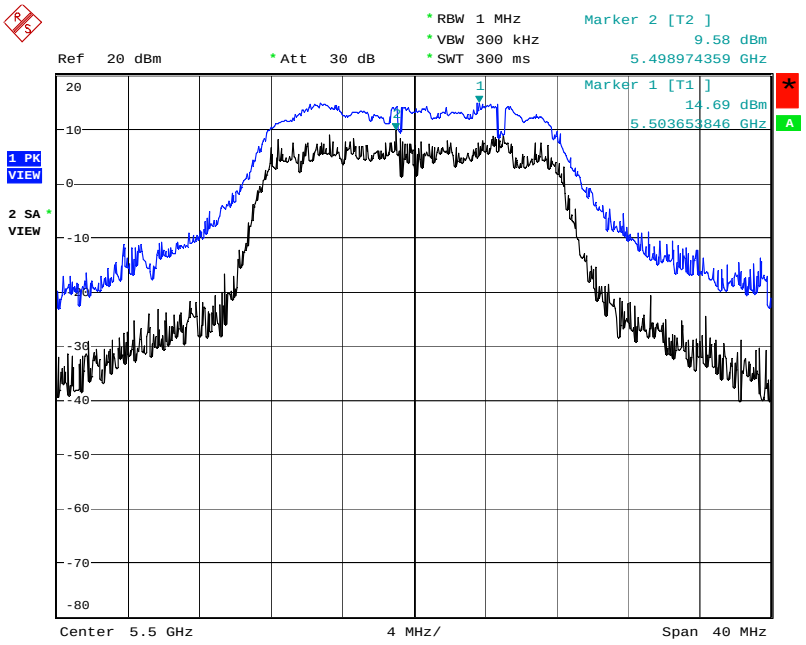
Date: 21.MAR.2008 16:45:16

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 5 / 5320 MHz



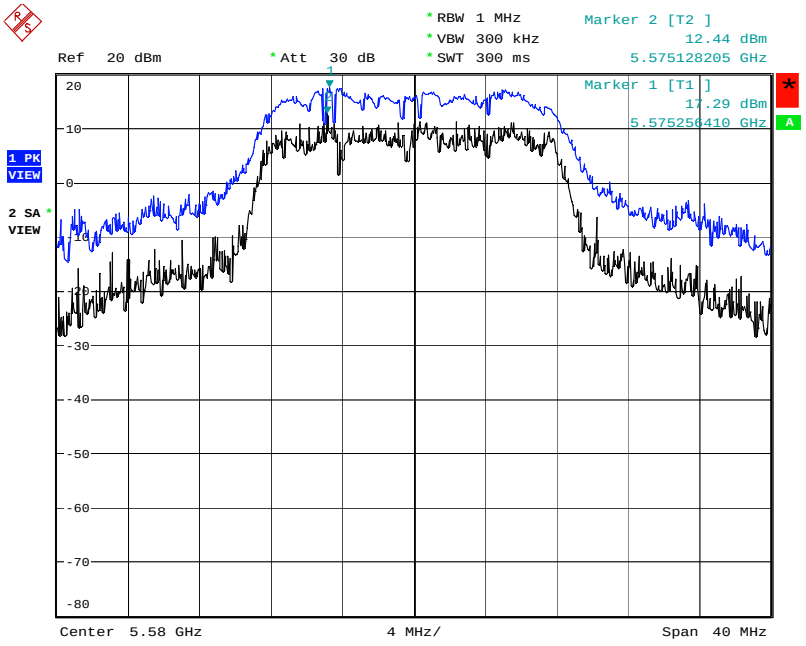
Date: 21.MAR.2008 16:46:07

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 5 / 5500 MHz



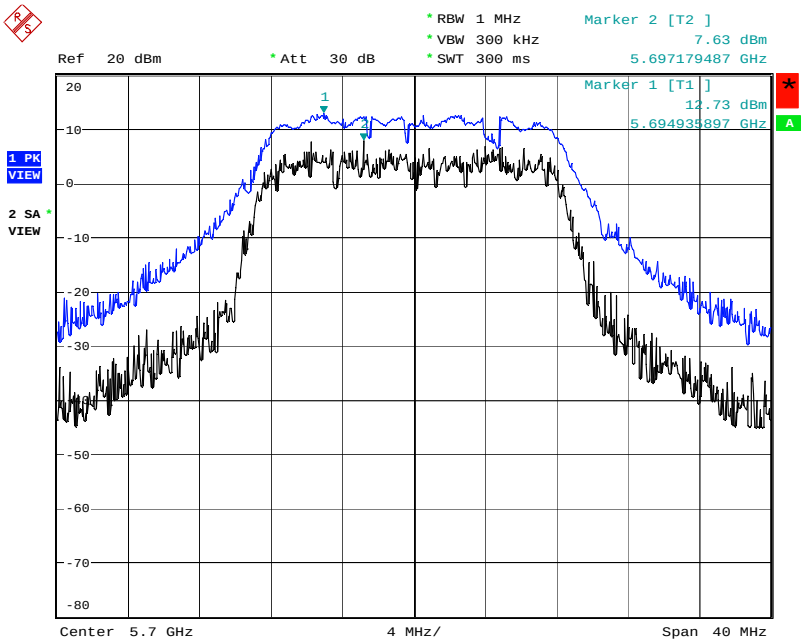
Date: 21.MAR.2008 16:47:19

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 5 / 5580 MHz



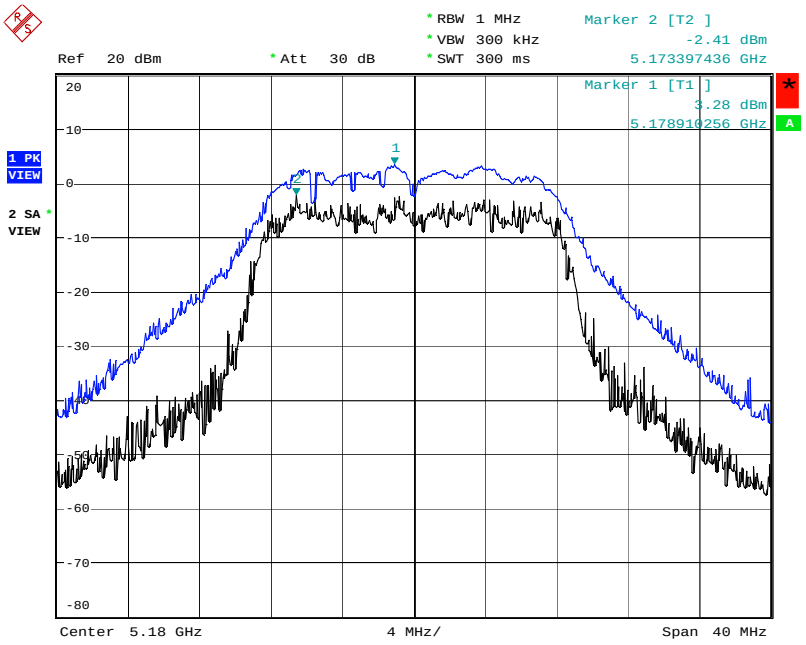
Date: 20.MAR.2008 20:18:01

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 5 / 5700 MHz



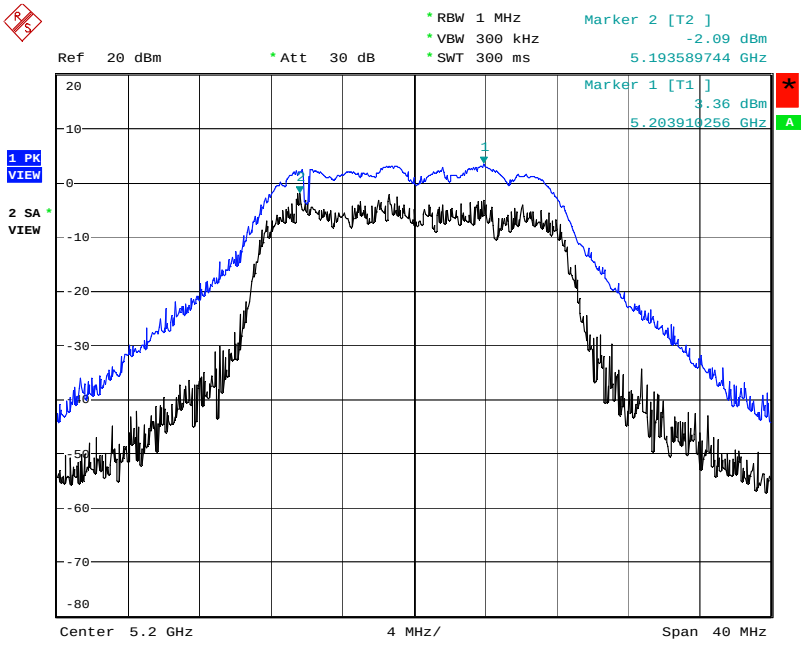
Date: 21.MAR.2008 16:48:13

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 6 / 5180 MHz



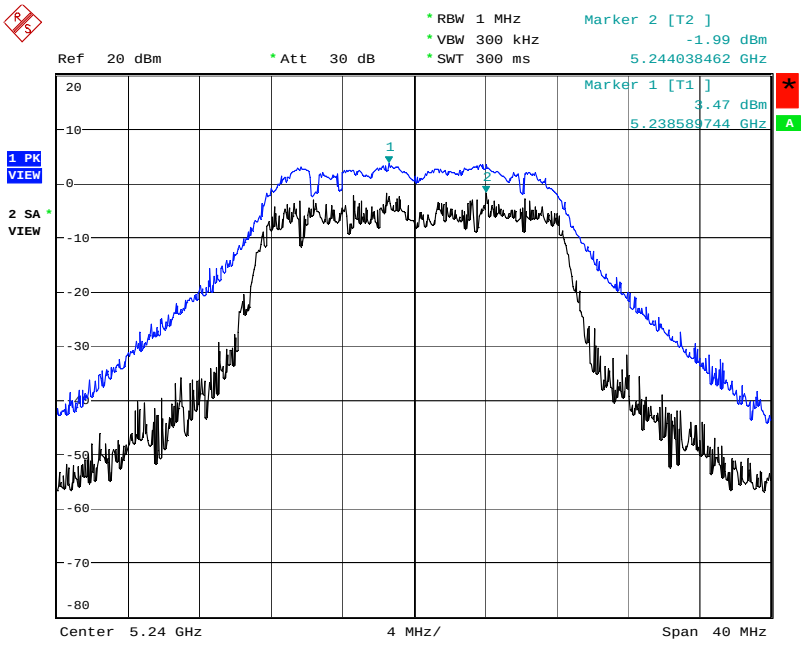
Date: 25.MAR.2008 14:25:30

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 6 / 5260 MHz



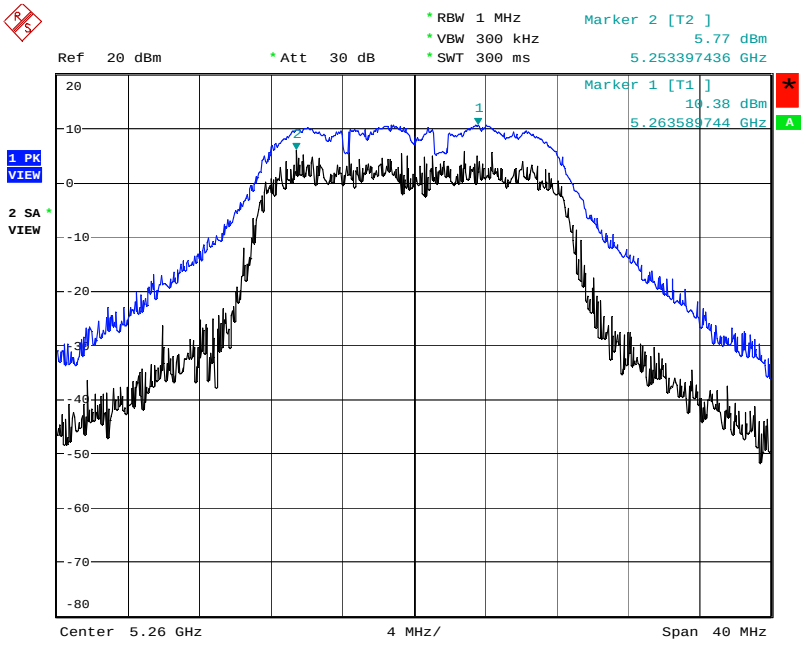
Date: 25.MAR.2008 14:26:31

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 6 / 5240 MHz



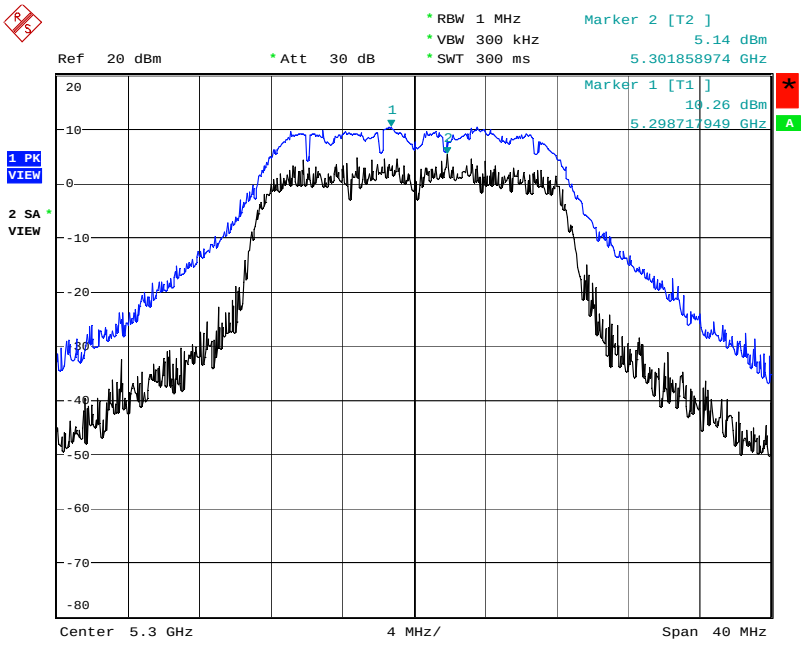
Date: 25.MAR.2008 14:27:25

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 6 / 5260 MHz



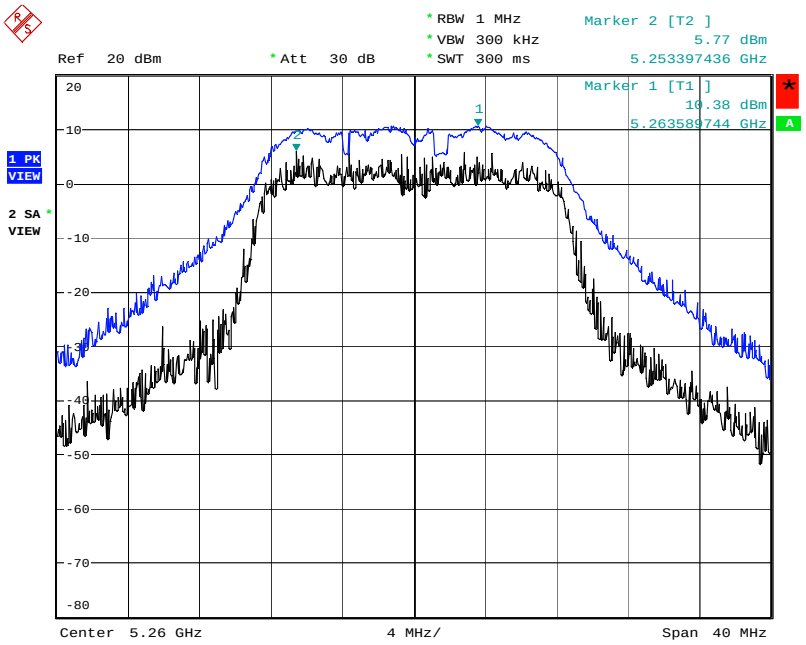
Date: 25.MAR.2008 14:30:30

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 6 / 5300 MHz



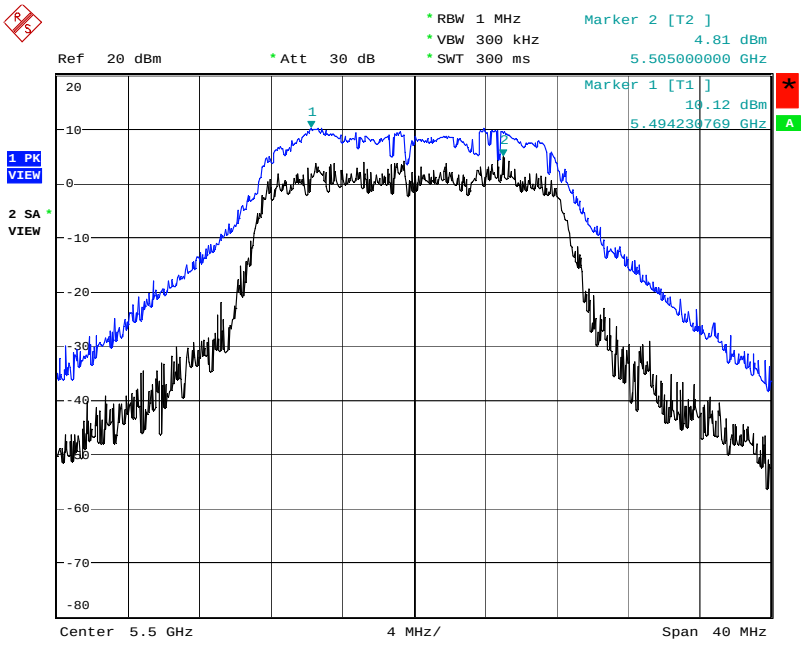
Date: 25.MAR.2008 14:31:20

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 6 / 5320 MHz



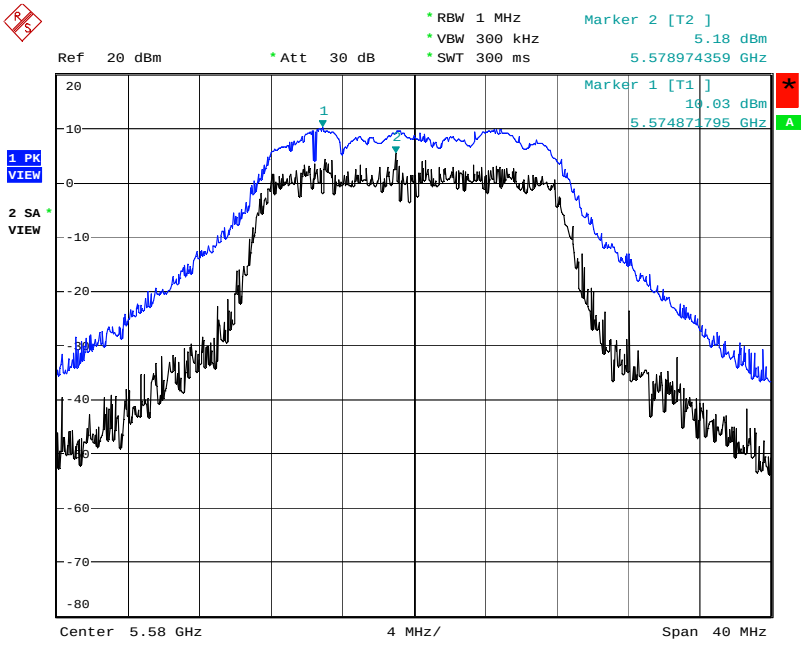
Date: 25.MAR.2008 14:30:30

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 6 / 5500 MHz



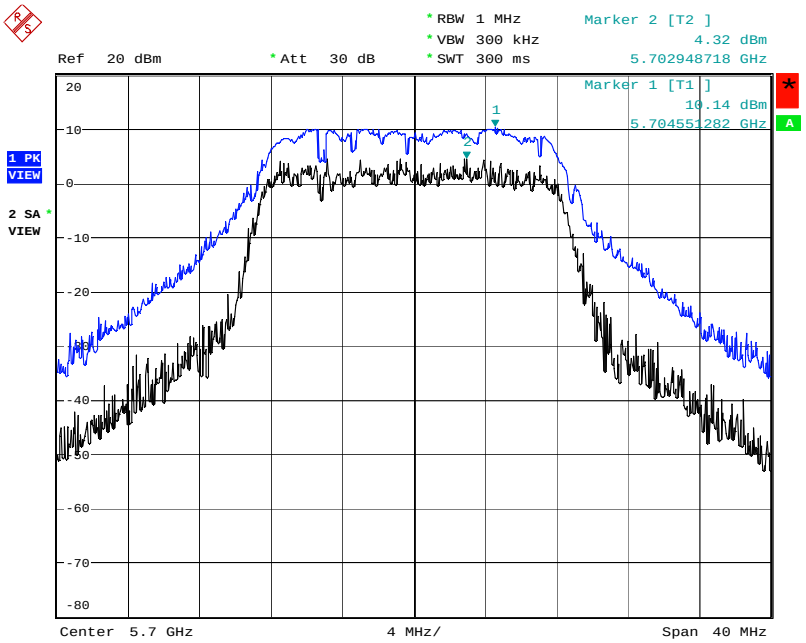
Date: 25.MAR.2008 14:33:04

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 6 / 5580 MHz



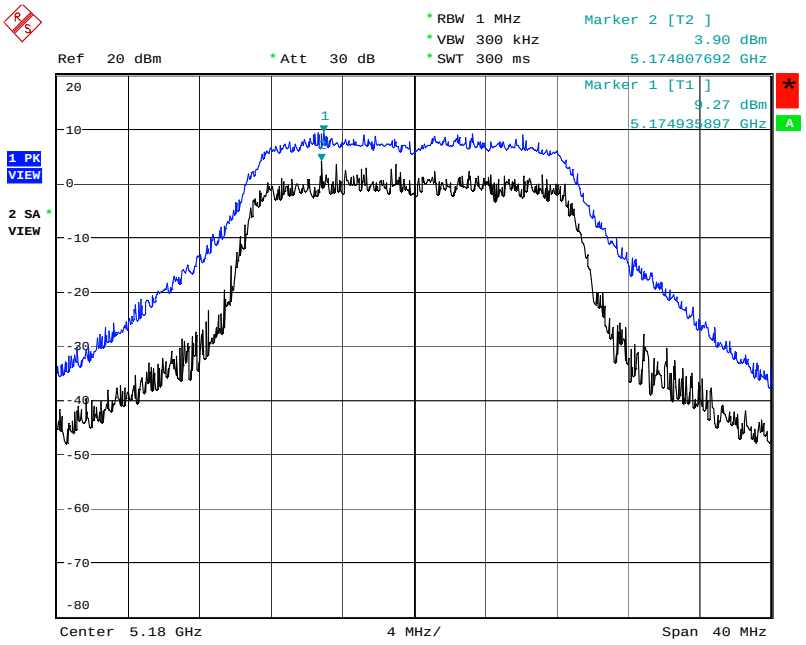
Date: 25.MAR.2008 14:34:14

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 6 / 5700 MHz



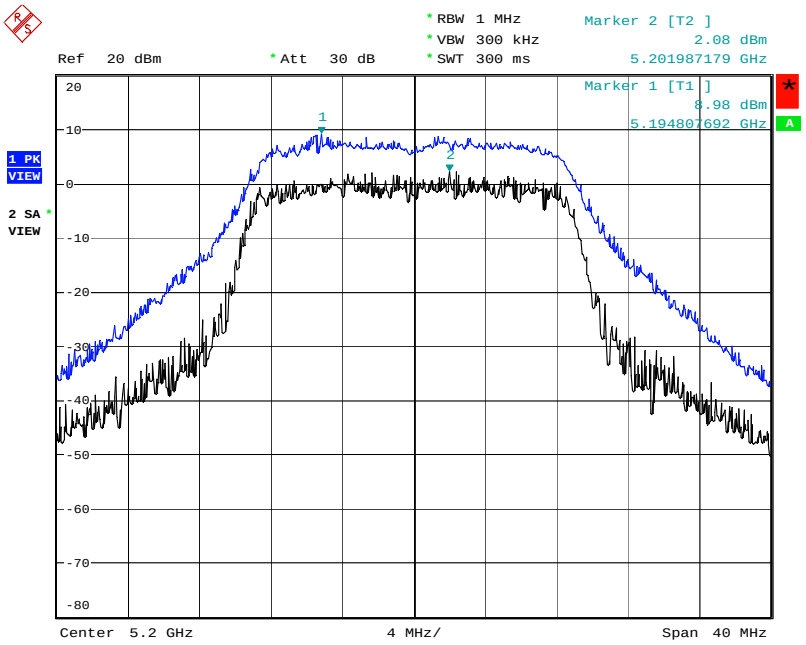
Date: 25.MAR.2008 14:35:11

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 7 / 5180 MHz



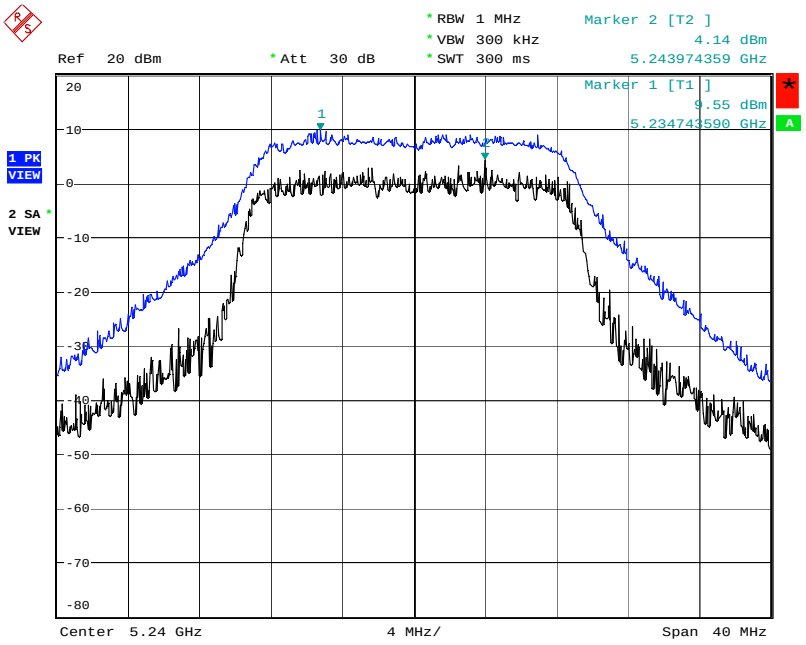
Date: 20.MAR.2008 20:02:55

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 7 / 5260 MHz

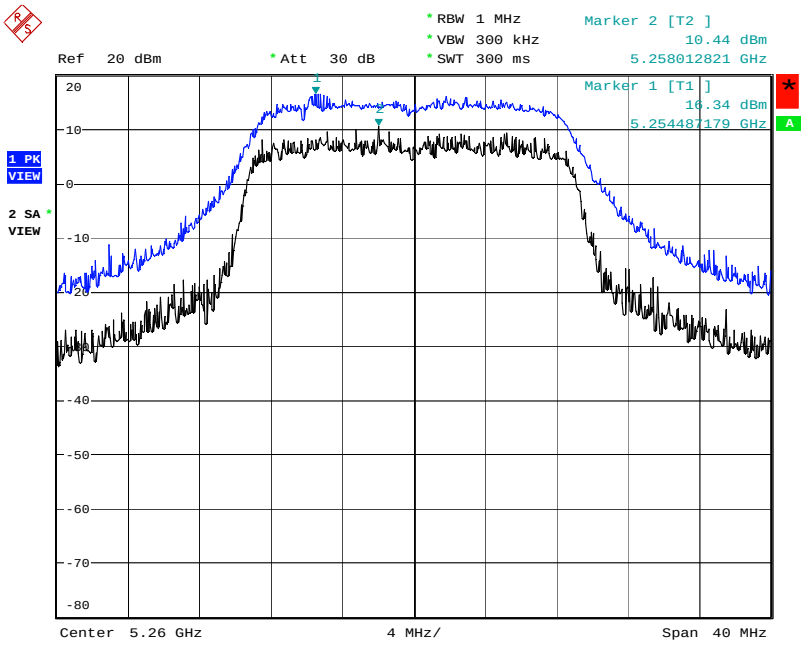


Date: 20.MAR.2008 20:01:21

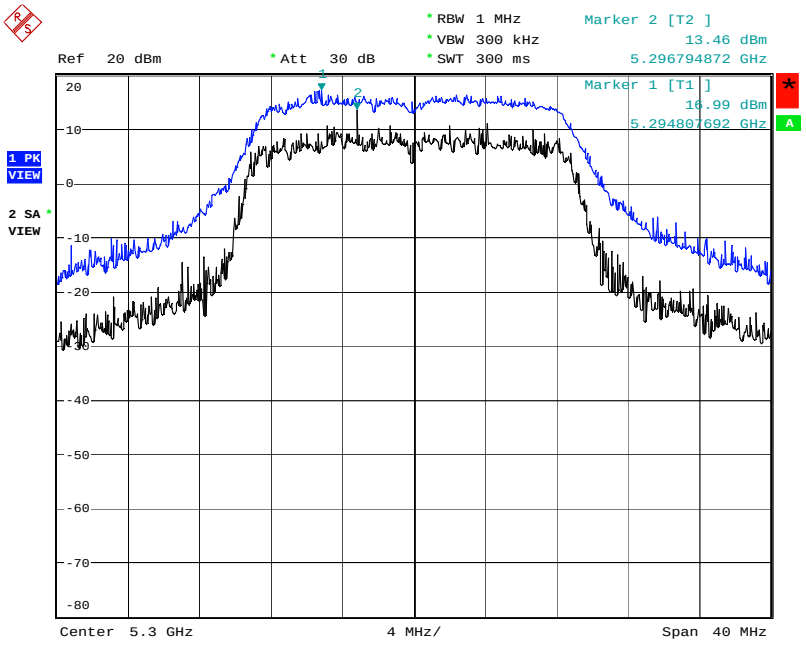
Peak Excursion Plot on Configuration IEEE 802.11a Ant. 7 / 5240 MHz



Peak Excursion Plot on Configuration IEEE 802.11a Ant. 7 / 5260 MHz

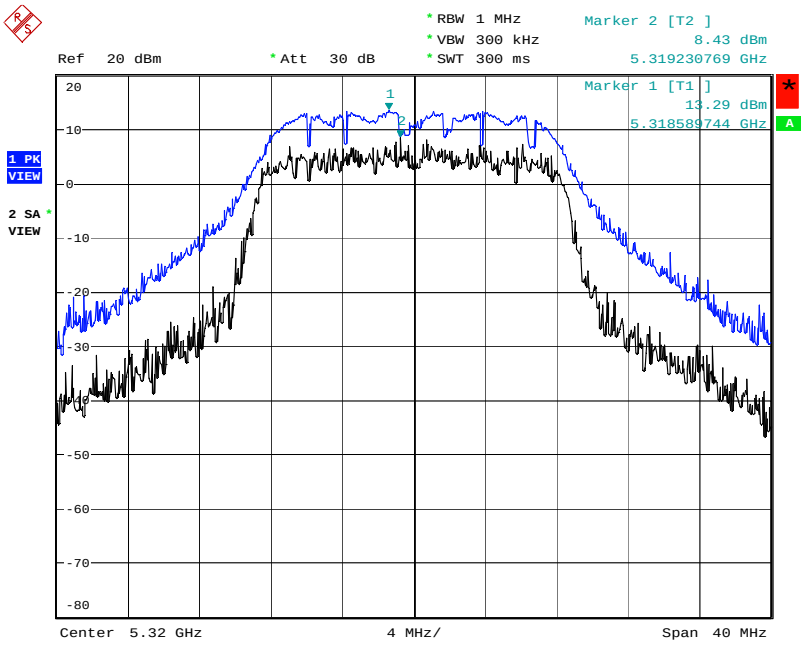


Peak Excursion Plot on Configuration IEEE 802.11a Ant. 7 / 5300 MHz



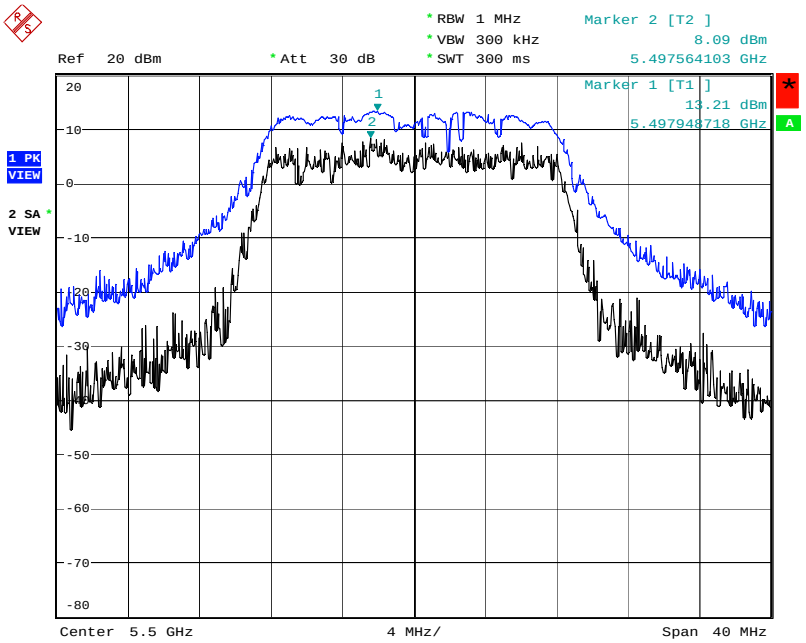
Date: 20.MAR.2008 19:56:36

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 7 / 5320 MHz



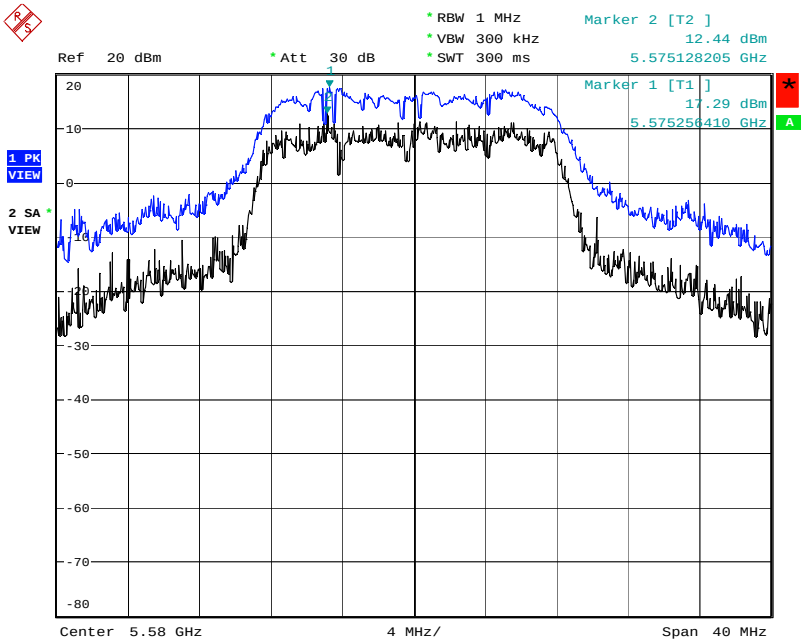
Date: 21.MAR.2008 16:46:07

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 7 / 5500 MHz



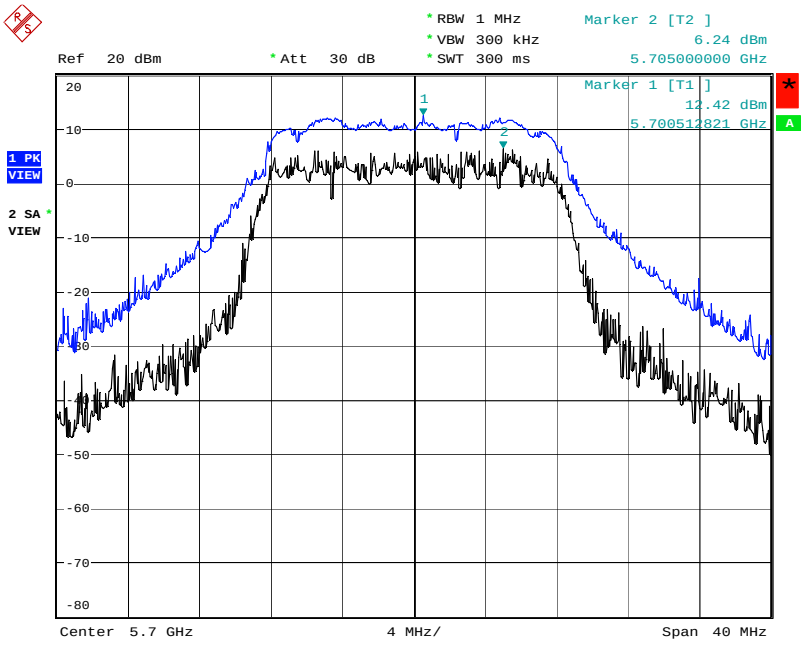
Date: 26.MAR.2008 17:33:59

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 7 / 5580 MHz



Date: 20.MAR.2008 20:18:01

Peak Excursion Plot on Configuration IEEE 802.11a Ant. 7 / 5700 MHz



Date: 20.MAR.2008 20:17:00

4.6. Radiated Emissions Measurement

4.6.1. Limit

For transmitters operating in the 5.15-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.470-5.725 GHz band: all emissions outside of the 5.470-5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). For transmitters operating in the 5.725-5.825 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17 dBm/MHz (78.3dBuV/m at 3m); for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27 dBm/MHz (68.3dBuV/m at 3m). In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

4.6.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40 GHz
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (Emission in non-restricted band)	1000KHz / 1000KHz for peak

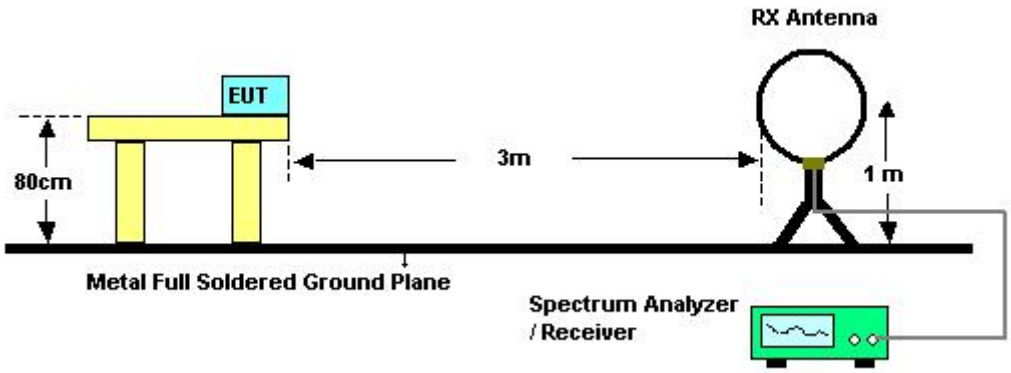
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 116kHz for QP

4.6.3. Test Procedures

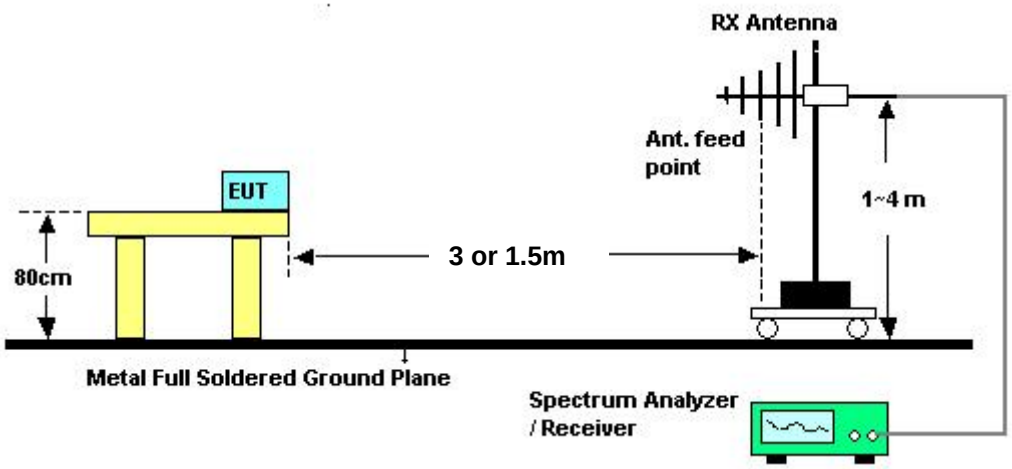
1. Configure the EUT according to ANSI C63.4. The EUT was placed on the top of the turntable 0.8 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

4.6.4. Test Setup Layout

For radiated emissions below 30MHz



For radiated emissions above 30MHz



Above 5GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade form 3m to 1.5m.

Distance extrapolation factor = 20 log (specific distance [3m] / test distance [1.5m]) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor [6 dB].

4.6.5. Test Deviation

There is no deviation with the original standard.

4.6.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.6.7. Results of Radiated Emissions (9kHz~30MHz)

Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen		

Freq. (MHz)	Level (dBuV)	Over Limit (dB)	Limit Line (dBuV)	Remark
-	-	-	-	See Note

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

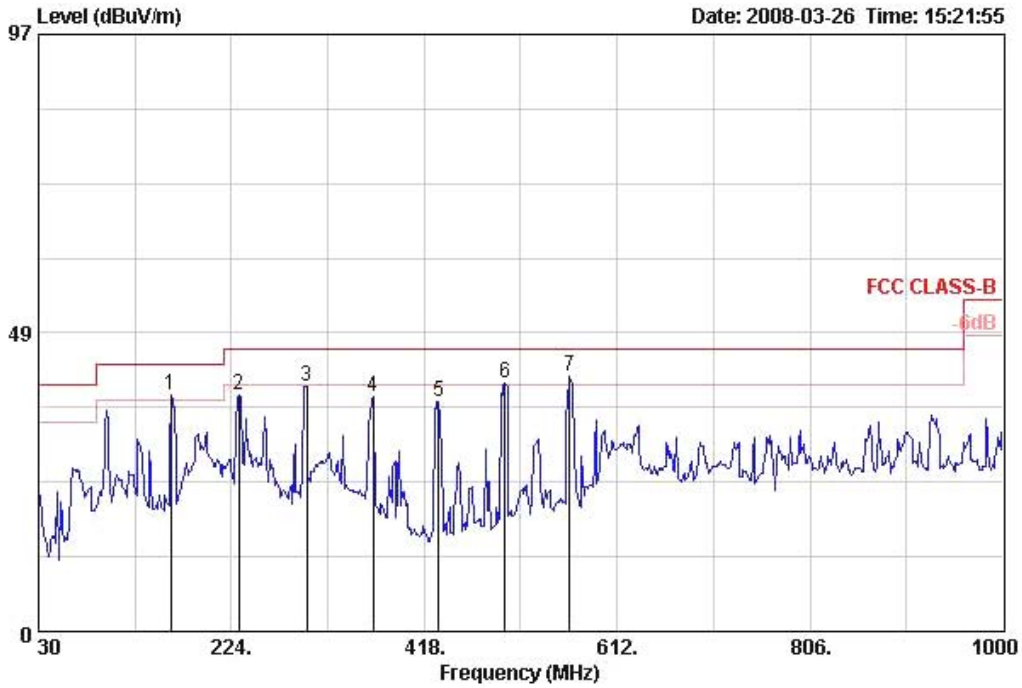
Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor.

4.6.8. Results of Radiated Emissions (30MHz~1GHz)

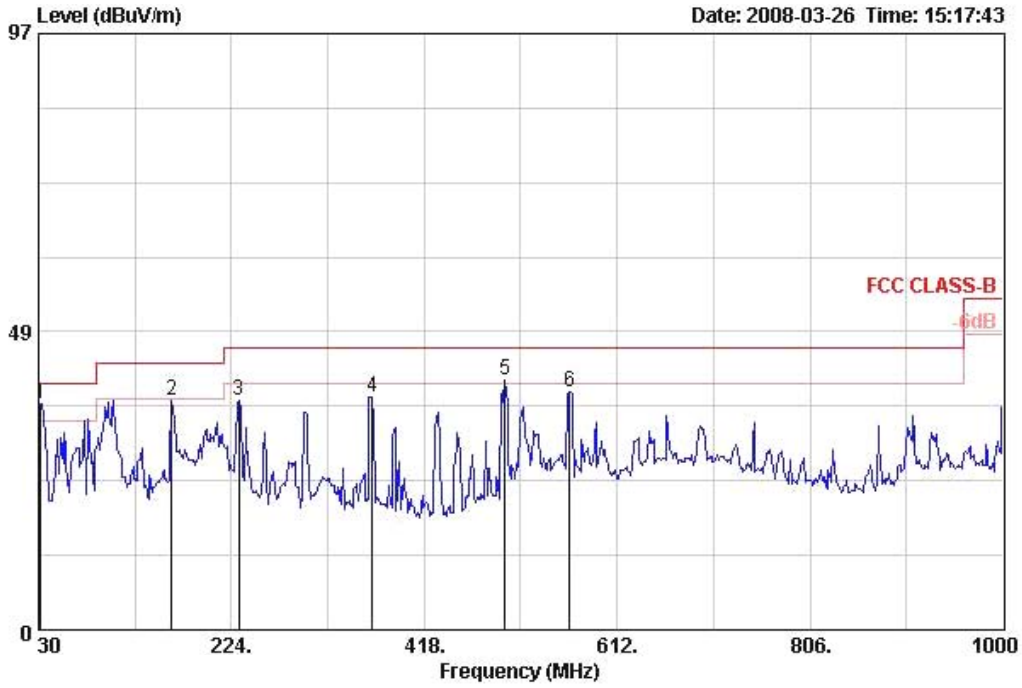
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	162.890	38.33	-5.17	43.50	57.35	10.51	2.00	31.53	Peak	100	-1	HORIZONTAL
2	231.760	38.54	-7.46	46.00	56.41	11.30	2.21	31.38	Peak	100	-1	HORIZONTAL
3	299.660	39.92	-6.08	46.00	55.04	14.00	2.20	31.32	Peak	100	-1	HORIZONTAL
4	366.590	38.01	-7.99	46.00	50.88	15.80	2.50	31.17	Peak	100	-1	HORIZONTAL
5	432.550	37.21	-8.79	46.00	48.35	16.99	2.83	30.96	Peak	100	-1	HORIZONTAL
6 !	499.480	40.42	-5.58	46.00	50.19	17.89	3.28	30.94	Peak	100	-1	HORIZONTAL
7 @	564.470	41.45	-4.55	46.00	50.07	18.96	3.17	30.75	Peak	100	-1	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	31.940	36.76	-3.24	40.00	48.84	18.66	0.93	31.67	Peak	400	-1	VERTICAL
2	163.860	37.34	-6.16	43.50	56.39	10.48	2.00	31.53	Peak	400	-1	VERTICAL
3	231.760	37.18	-8.82	46.00	55.05	11.30	2.21	31.38	Peak	400	-1	VERTICAL
4	365.620	37.92	-8.08	46.00	50.83	15.78	2.49	31.17	Peak	400	-1	VERTICAL
5 !	499.480	40.52	-5.48	46.00	50.29	17.89	3.28	30.94	Peak	400	-1	VERTICAL
6	564.470	38.82	-7.18	46.00	47.44	18.96	3.17	30.75	Peak	400	-1	VERTICAL

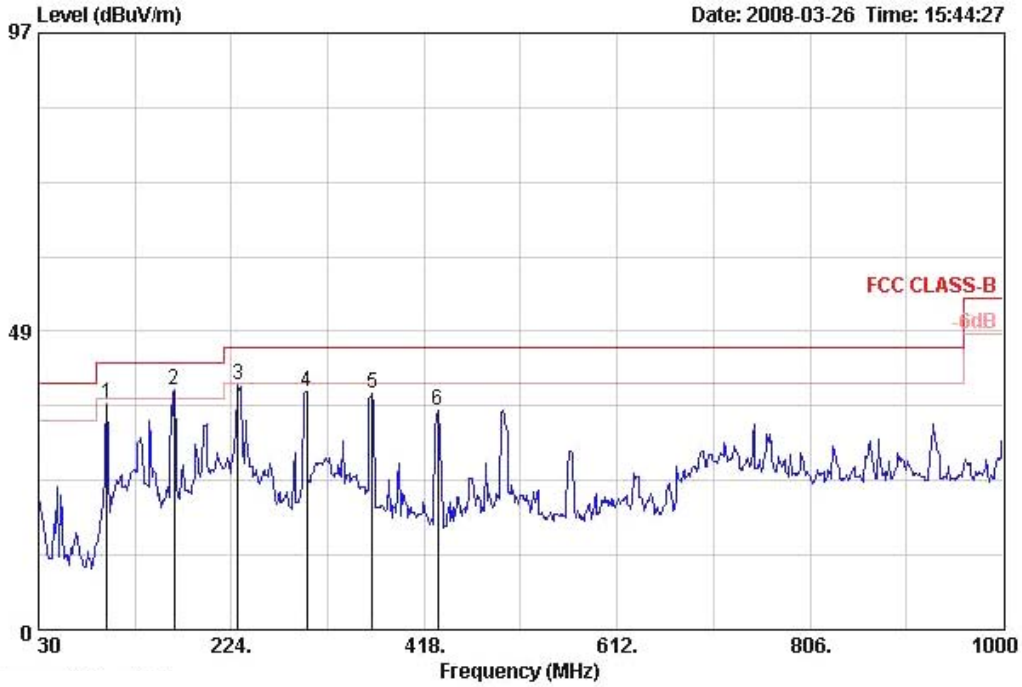
Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

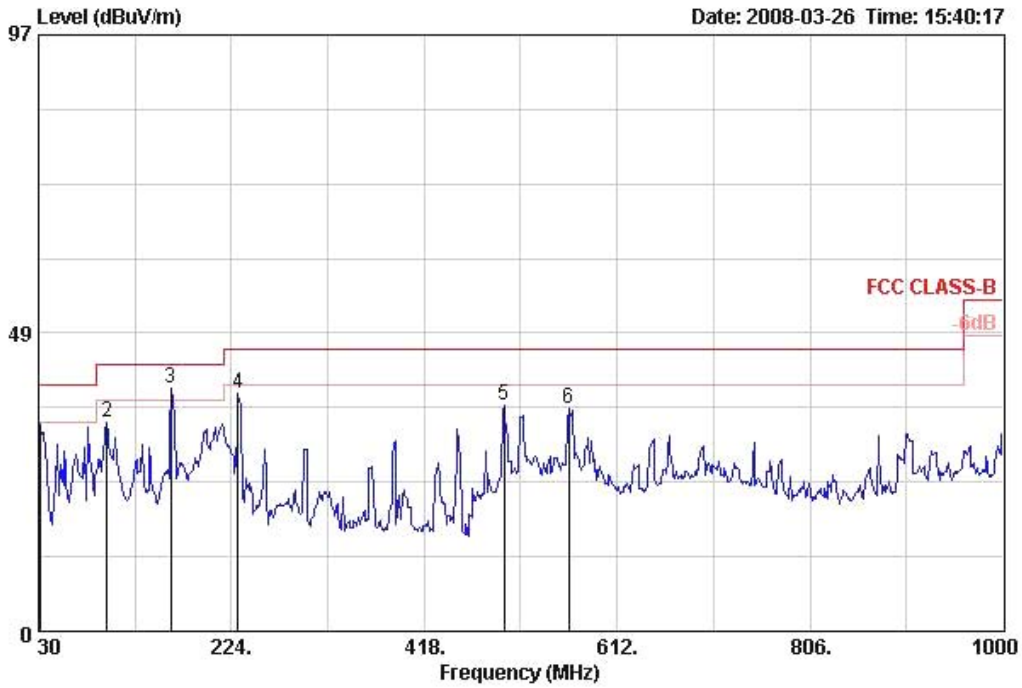
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 2

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	98.870	36.73	-6.77	43.50	55.93	11.02	1.50	31.72	Peak	100	-4	HORIZONTAL
2 @	166.770	38.85	-4.65	43.50	58.01	10.39	2.00	31.55	Peak	100	-4	HORIZONTAL
3	230.790	39.68	-6.32	46.00	57.65	11.20	2.21	31.38	Peak	100	-4	HORIZONTAL
4	299.660	38.61	-7.39	46.00	53.73	14.00	2.20	31.32	Peak	100	-4	HORIZONTAL
5	365.620	38.37	-7.63	46.00	51.27	15.78	2.49	31.17	Peak	100	-4	HORIZONTAL
6	431.580	35.51	-10.49	46.00	46.66	16.98	2.83	30.96	Peak	100	-4	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	30.970	33.60	-6.40	40.00	45.09	19.38	0.80	31.67	Peak	400	-1	VERTICAL
2	98.870	34.12	-9.38	43.50	53.32	11.02	1.50	31.72	Peak	400	-1	VERTICAL
3 @	162.890	39.65	-3.85	43.50	58.67	10.51	2.00	31.53	Peak	400	-1	VERTICAL
4	230.790	38.62	-7.38	46.00	56.59	11.20	2.21	31.38	Peak	400	-1	VERTICAL
5	498.510	36.65	-9.35	46.00	46.43	17.87	3.28	30.94	Peak	400	-1	VERTICAL
6	563.500	36.22	-9.78	46.00	44.85	18.95	3.17	30.75	Peak	400	-1	VERTICAL

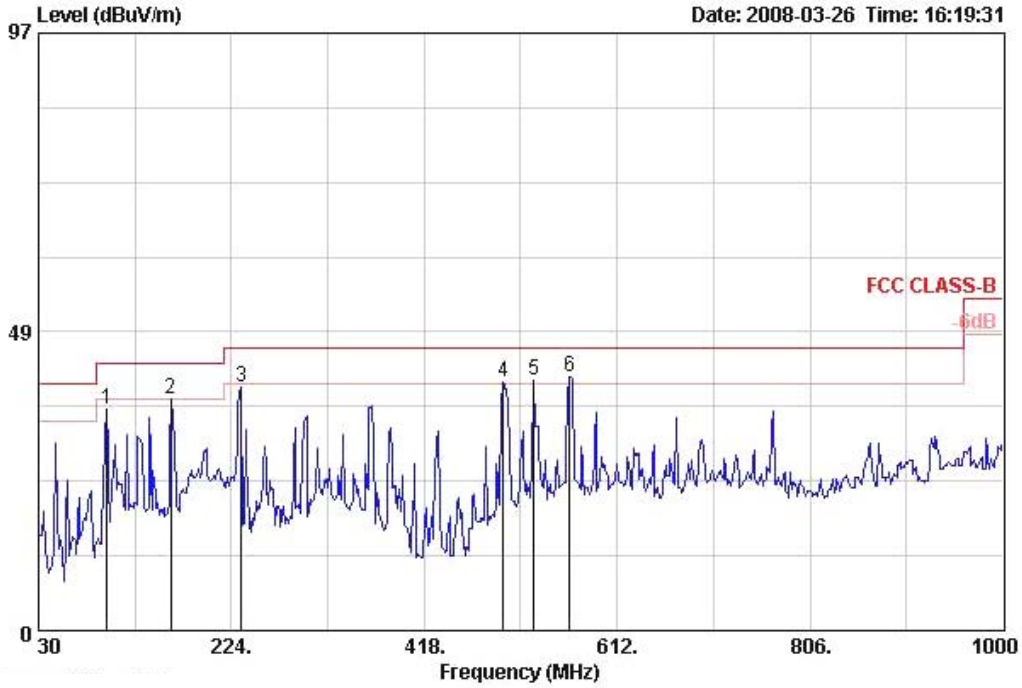
Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

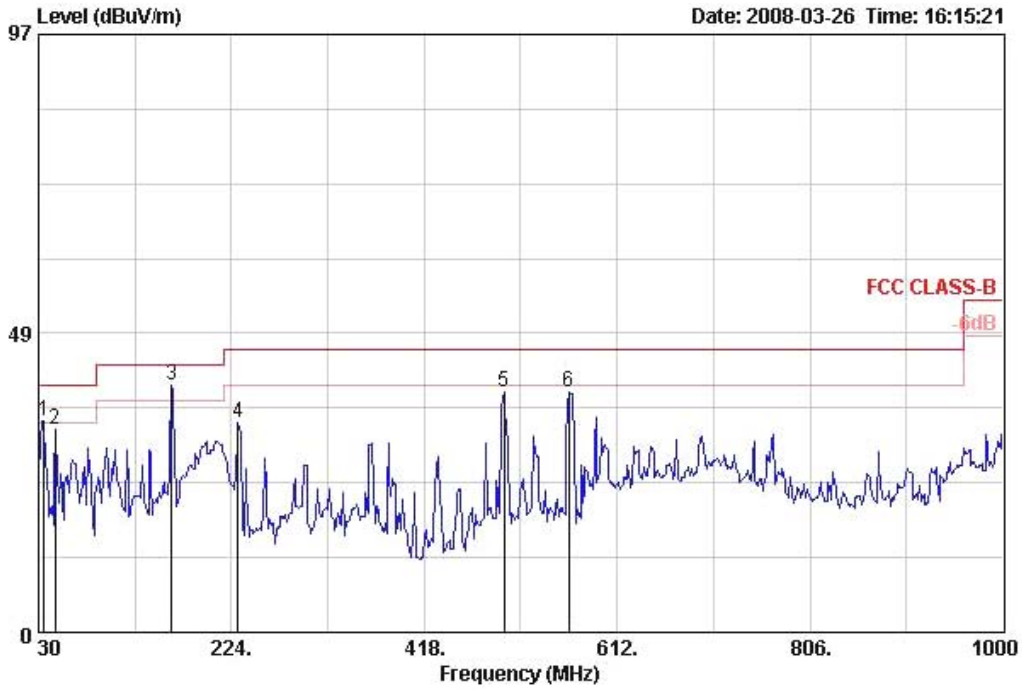
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 3

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	98.870	36.00	-7.50	43.50	55.20	11.02	1.50	31.72	Peak	100	-1	HORIZONTAL
2 !	162.890	37.55	-5.95	43.50	56.57	10.51	2.00	31.53	Peak	100	-1	HORIZONTAL
3	233.700	39.50	-6.50	46.00	57.15	11.50	2.23	31.38	Peak	100	-1	HORIZONTAL
4 !	497.540	40.30	-5.70	46.00	50.11	17.86	3.27	30.94	Peak	100	-1	HORIZONTAL
5 !	528.580	40.74	-5.26	46.00	49.86	18.47	3.24	30.83	Peak	100	-1	HORIZONTAL
6 !	564.470	41.19	-4.81	46.00	49.81	18.96	3.17	30.75	Peak	100	-1	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	35.820	34.33	-5.67	40.00	48.85	15.98	1.20	31.70	Peak	400	-1	VERTICAL
2	46.490	32.86	-7.14	40.00	52.89	10.67	1.10	31.79	Peak	400	-1	VERTICAL
3 @	163.860	39.96	-3.54	43.50	59.01	10.48	2.00	31.53	Peak	400	-1	VERTICAL
4	230.790	33.89	-12.11	46.00	51.86	11.20	2.21	31.38	Peak	400	-1	VERTICAL
5	498.510	38.97	-7.03	46.00	48.75	17.87	3.28	30.94	Peak	400	-1	VERTICAL
6	563.500	38.86	-7.14	46.00	47.48	18.95	3.17	30.75	Peak	400	-1	VERTICAL

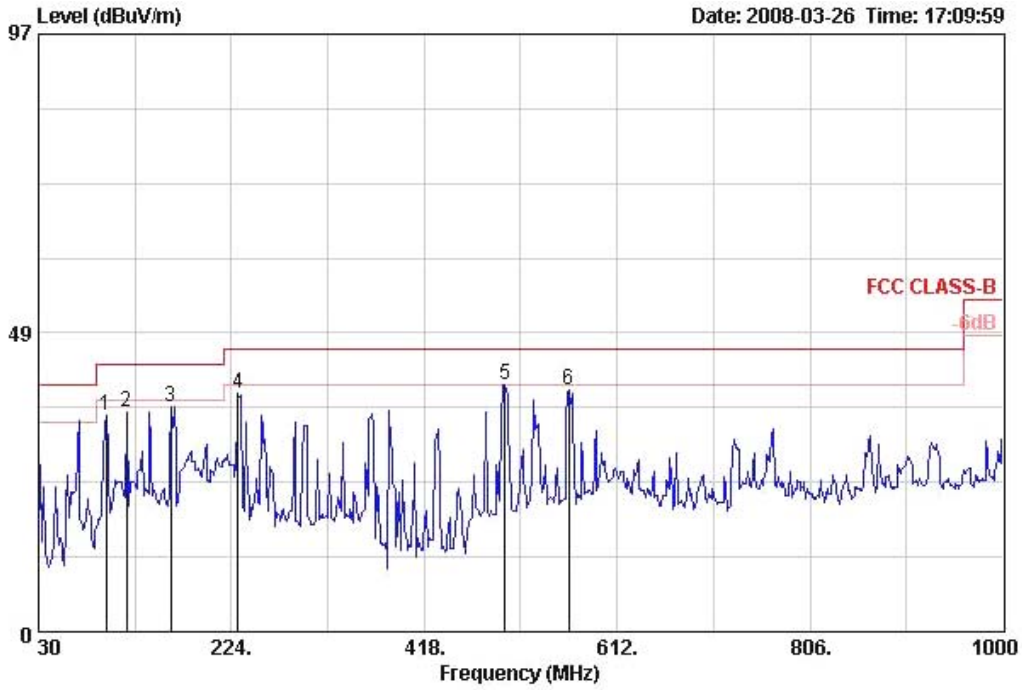
Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

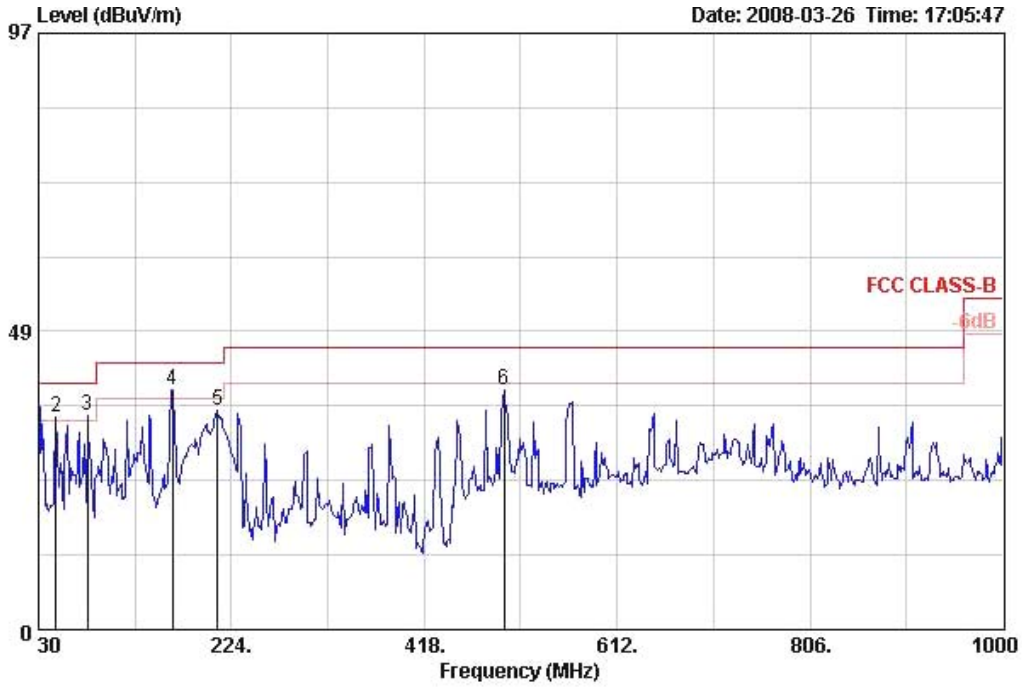
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 4

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	97.900	35.03	-8.47	43.50	54.42	10.84	1.50	31.73	Peak	100	-4	HORIZONTAL
2	118.270	35.55	-7.95	43.50	52.86	12.88	1.57	31.76	Peak	100	-4	HORIZONTAL
3	162.890	36.55	-6.95	43.50	55.57	10.51	2.00	31.53	Peak	100	-4	HORIZONTAL
4	230.790	38.65	-7.35	46.00	56.62	11.20	2.21	31.38	Peak	100	-4	HORIZONTAL
5 !	499.480	40.14	-5.86	46.00	49.91	17.89	3.28	30.94	Peak	100	-4	HORIZONTAL
6	563.500	39.16	-6.84	46.00	47.78	18.95	3.17	30.75	Peak	100	-4	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 @	30.000	36.19	-3.81	40.00	46.96	20.10	0.80	31.67	Peak	400	-1	VERTICAL
2 !	47.460	34.56	-5.44	40.00	54.97	10.30	1.10	31.81	Peak	400	-1	VERTICAL
3 !	79.470	34.93	-5.07	40.00	57.87	7.51	1.30	31.75	Peak	400	-1	VERTICAL
4 !	164.830	39.06	-4.44	43.50	58.15	10.45	2.00	31.54	Peak	400	-1	VERTICAL
5	210.420	35.61	-7.89	43.50	54.37	10.60	2.06	31.42	Peak	400	-1	VERTICAL
6	498.510	38.86	-7.14	46.00	48.64	17.87	3.28	30.94	Peak	400	-1	VERTICAL

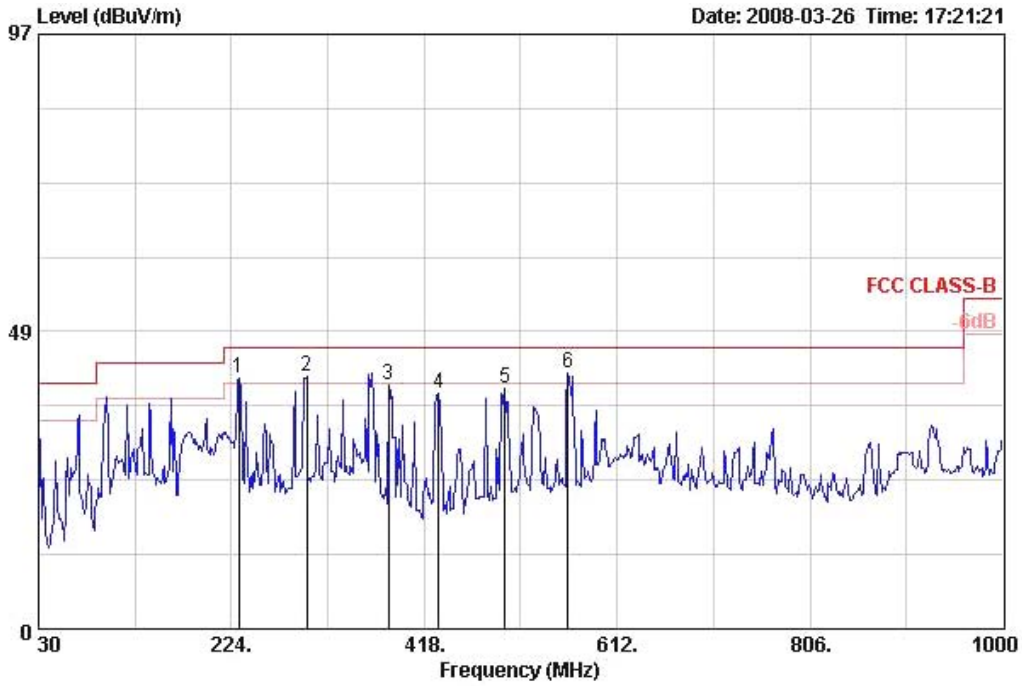
Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

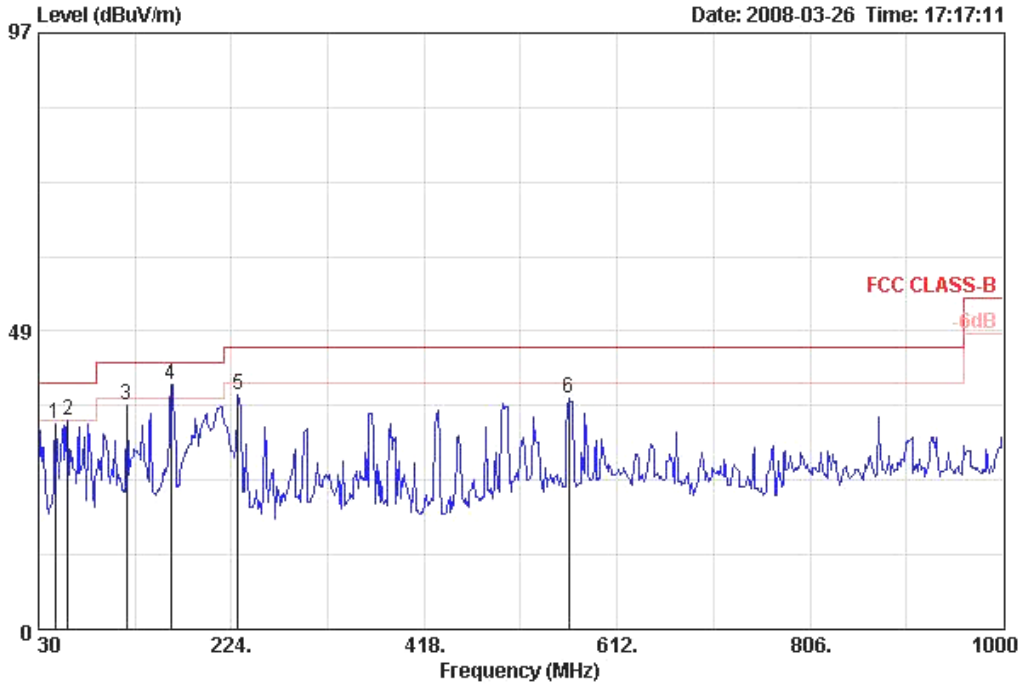
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 5

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	231.760	40.85	-5.15	46.00	58.72	11.30	2.21	31.38	Peak	100	-5	HORIZONTAL
2 !	299.660	41.09	-4.91	46.00	56.21	14.00	2.20	31.32	Peak	100	-5	HORIZONTAL
3	382.110	39.90	-6.10	46.00	52.23	16.18	2.60	31.10	Peak	100	-5	HORIZONTAL
4	432.550	38.54	-7.46	46.00	49.68	16.99	2.83	30.96	Peak	100	-5	HORIZONTAL
5	499.480	39.35	-6.65	46.00	49.12	17.89	3.28	30.94	Peak	100	-5	HORIZONTAL
6 !	562.530	41.70	-4.30	46.00	50.32	18.95	3.18	30.75	Peak	100	-5	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	46.490	33.36	-6.64	40.00	53.38	10.67	1.10	31.79	Peak	400	-5	VERTICAL
2	59.100	34.00	-6.00	40.00	57.50	6.86	1.40	31.76	Peak	400	-5	VERTICAL
3	118.270	36.39	-7.11	43.50	53.69	12.88	1.57	31.76	Peak	400	-5	VERTICAL
4 @	162.890	39.87	-3.63	43.50	58.89	10.51	2.00	31.53	Peak	400	-5	VERTICAL
5	230.790	38.25	-7.75	46.00	56.22	11.20	2.21	31.38	Peak	400	-5	VERTICAL
6	563.500	37.47	-8.53	46.00	46.09	18.95	3.17	30.75	Peak	400	-5	VERTICAL

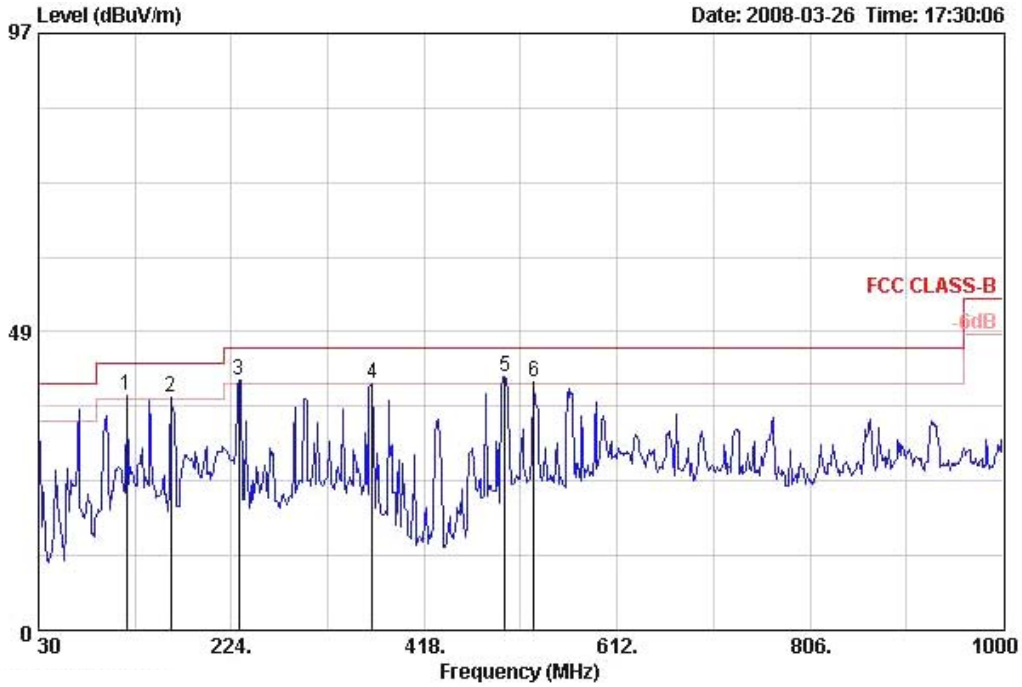
Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

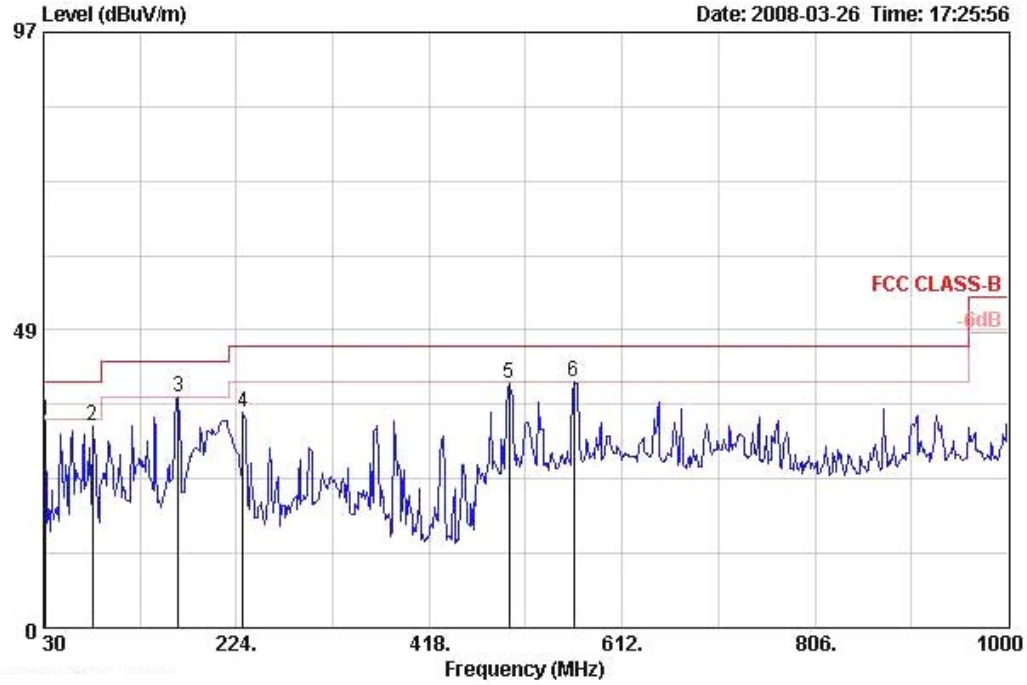
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 6

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	118.270	38.16	-5.34	43.50	55.46	12.88	1.57	31.76	Peak	100	-1	HORIZONTAL
2 !	162.890	37.79	-5.71	43.50	56.81	10.51	2.00	31.53	Peak	100	-1	HORIZONTAL
3 !	231.760	40.66	-5.34	46.00	58.53	11.30	2.21	31.38	Peak	100	-1	HORIZONTAL
4	365.620	39.94	-6.06	46.00	52.85	15.78	2.49	31.17	Peak	100	-1	HORIZONTAL
5 @	499.480	41.31	-4.69	46.00	51.08	17.89	3.28	30.94	Peak	100	-1	HORIZONTAL
6 !	528.580	40.41	-5.59	46.00	49.53	18.47	3.24	30.83	Peak	100	-1	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	31.940	33.82	-6.18	40.00	45.90	18.66	0.93	31.67	Peak	400	-1	VERTICAL
2	79.470	32.81	-7.19	40.00	55.75	7.51	1.30	31.75	Peak	400	-1	VERTICAL
3 !	165.800	37.64	-5.86	43.50	56.76	10.42	2.00	31.55	Peak	400	-1	VERTICAL
4	230.790	35.22	-10.78	46.00	53.19	11.20	2.21	31.38	Peak	400	-1	VERTICAL
5	498.510	39.89	-6.11	46.00	49.67	17.87	3.28	30.94	Peak	400	-1	VERTICAL
6	563.500	39.96	-6.04	46.00	48.59	18.95	3.17	30.75	Peak	400	-1	VERTICAL

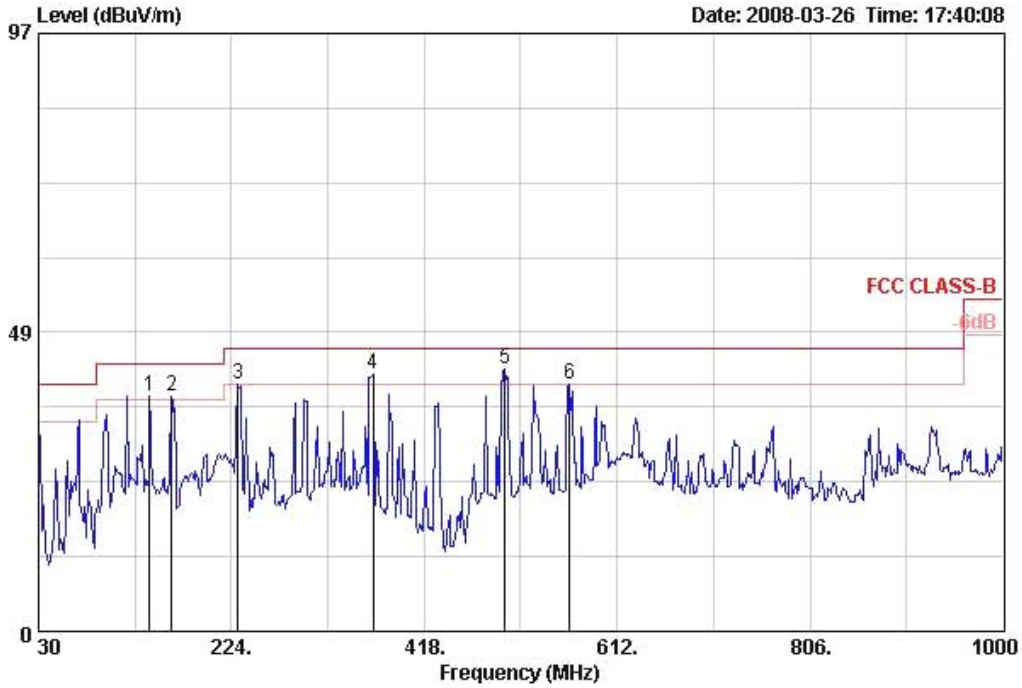
Note:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

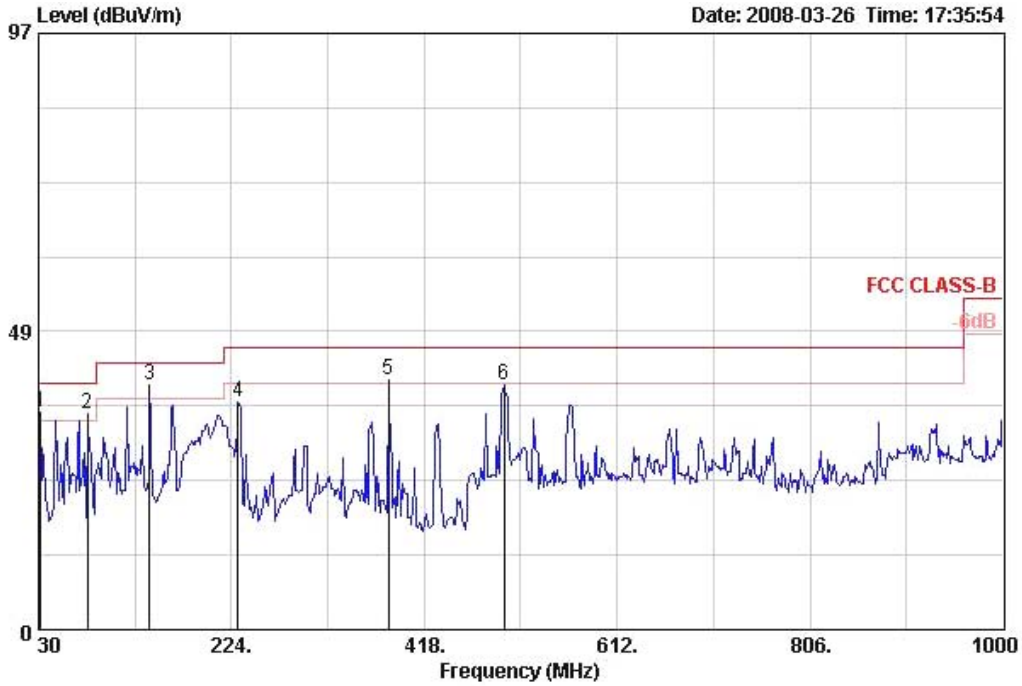
Temperature	23℃	Humidity	62%
Test Engineer	Jax Chen	Configurations	Normal Link / Ant. 7

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	141.550	38.25	-5.25	43.50	56.43	11.69	1.70	31.56	Peak	100	-1	HORIZONTAL
2 !	163.860	38.15	-5.35	43.50	57.21	10.48	2.00	31.53	Peak	100	-1	HORIZONTAL
3	230.790	39.97	-6.03	46.00	57.94	11.20	2.21	31.38	Peak	100	-1	HORIZONTAL
4 !	366.590	41.59	-4.41	46.00	54.46	15.80	2.50	31.17	Peak	100	-1	HORIZONTAL
5 @	499.480	42.62	-3.38	46.00	52.39	17.89	3.28	30.94	Peak	100	-1	HORIZONTAL
6	564.470	39.95	-6.05	46.00	48.57	18.96	3.17	30.75	Peak	100	-1	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	31.940	35.26	-4.74	40.00	47.34	18.66	0.93	31.67	Peak	400	-5	VERTICAL
2 !	79.470	35.05	-4.95	40.00	57.99	7.51	1.30	31.75	Peak	400	-5	VERTICAL
3 @	141.550	39.70	-3.80	43.50	57.88	11.69	1.70	31.56	Peak	400	-5	VERTICAL
4	230.790	37.12	-8.88	46.00	55.09	11.20	2.21	31.38	Peak	400	-5	VERTICAL
5 !	382.110	40.53	-5.47	46.00	52.86	16.18	2.60	31.10	Peak	400	-5	VERTICAL
6	498.510	39.71	-6.29	46.00	49.49	17.87	3.28	30.94	Peak	400	-5	VERTICAL

Note:

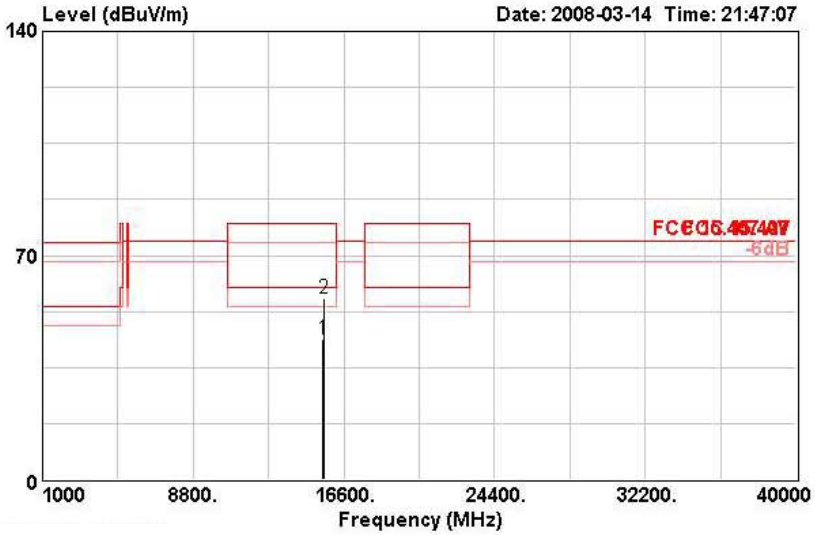
The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

4.6.9. Results for Radiated Emissions (1GHz~40GHz)

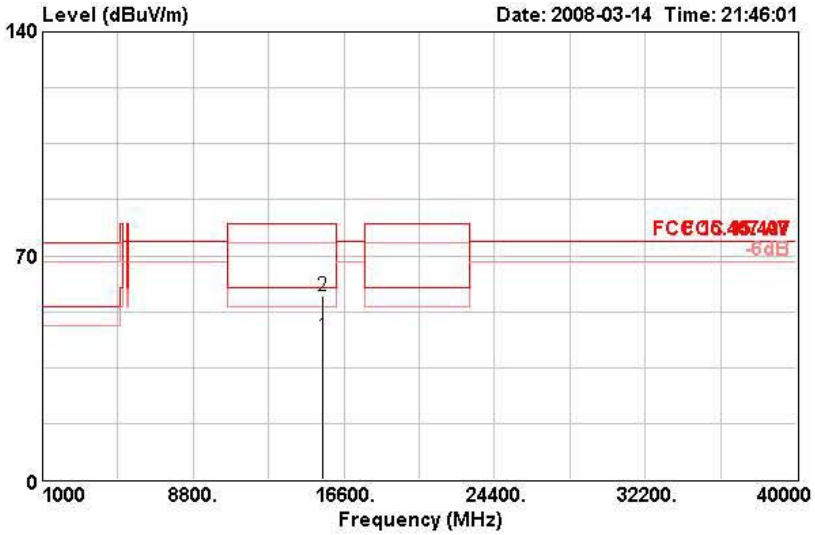
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 36 / Ant. 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	15532.440	43.92	-16.08	60.00	30.02	37.67	11.52	35.28	AVERAGE	130	307	HORIZONTAL
2	15543.720	56.77	-23.23	80.00	42.89	37.65	11.52	35.28	PEAK	130	307	HORIZONTAL

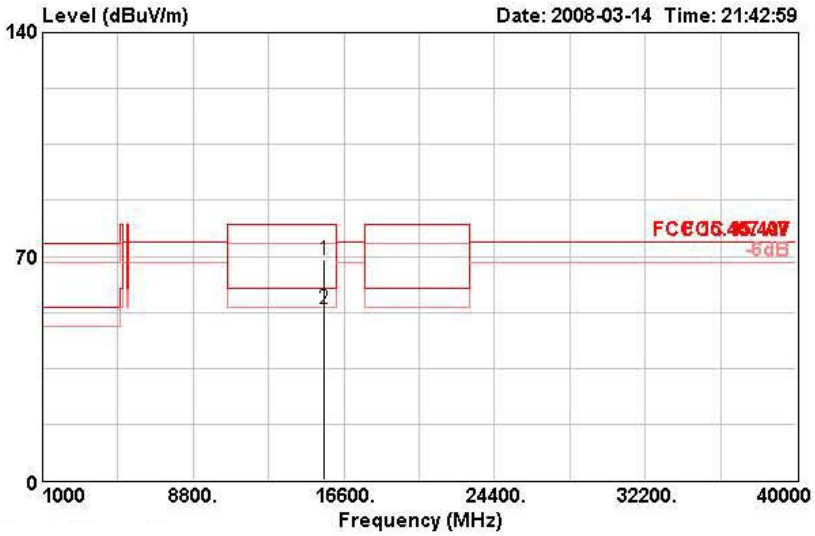
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	15532.360	44.66	-15.34	60.00	30.76	37.67	11.52	35.28	AVERAGE	110	184	VERTICAL
2	15532.520	57.41	-22.59	80.00	43.51	37.67	11.52	35.28	PEAK	110	184	VERTICAL

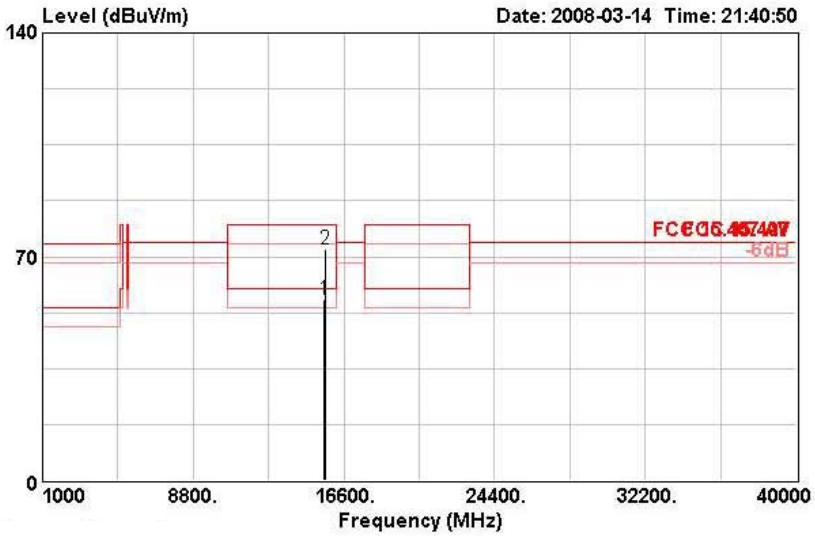
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 40 / Ant. 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	15590.080	69.13	-10.87	80.00	55.30	37.61	11.52	35.30	PEAK	128	304	HORIZONTAL
2	15601.000	53.76	-6.24	60.00	39.96	37.60	11.52	35.31	AVERAGE	128	304	HORIZONTAL

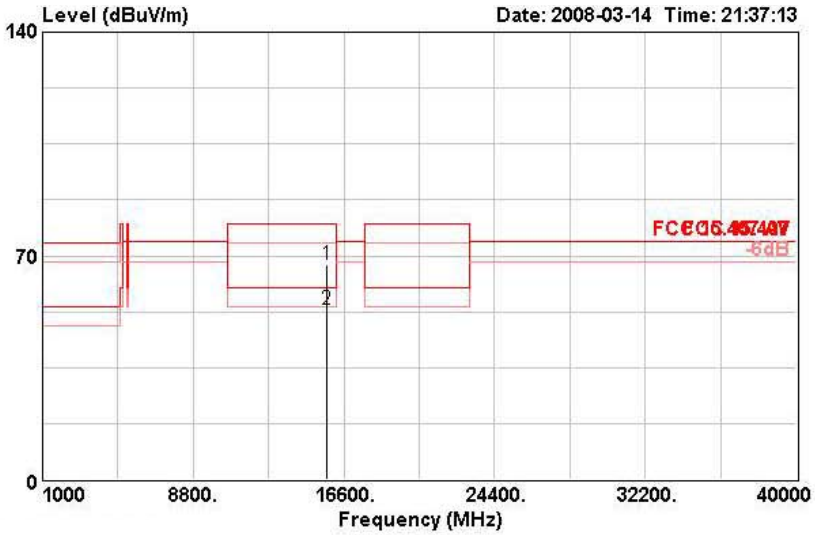
Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	15600.880	56.72	-3.28	60.00	42.92	37.60	11.52	35.31	AVERAGE	106	196	VERTICAL
2	15607.040	72.47	-7.53	80.00	58.67	37.60	11.52	35.31	PEAK	106	196	VERTICAL

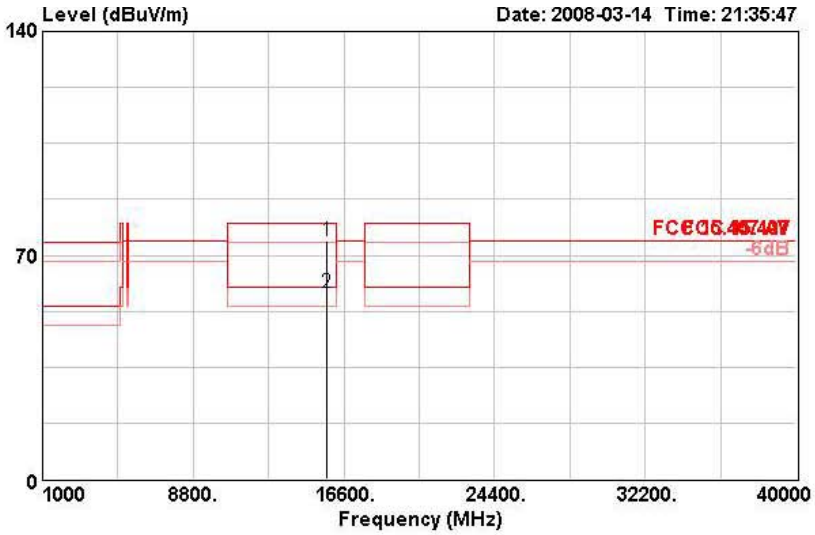
Temperature	23°C	Humidity	62%
Test Engineer	Jax Chen	Configurations	802.11a Ch 48 / Ant. 1

Horizontal



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1	15715.160	67.45	-12.55	80.00	53.81	37.48	11.51	35.35	PEAK	127	295	HORIZONTAL
2	15717.560	53.10	-6.90	60.00	39.46	37.48	11.51	35.35	AVERAGE	127	295	HORIZONTAL

Vertical



	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Remark	Ant Pos	Table Pos	Pol/Phase
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB		cm	deg	
1 !	15717.720	74.46	-5.54	80.00	60.82	37.48	11.51	35.35	PEAK	108	177	VERTICAL
2 !	15720.360	58.31	-1.69	60.00	44.67	37.48	11.51	35.35	AVERAGE	108	177	VERTICAL